Welding Engineer

FACT FILE

MID-JUNE

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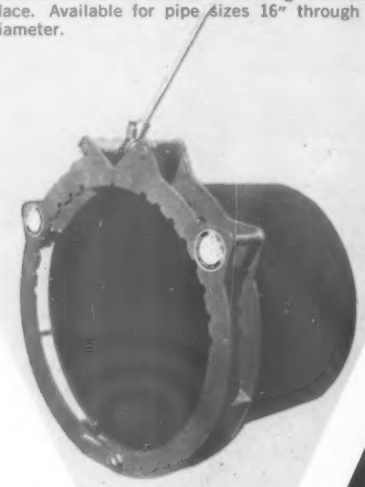

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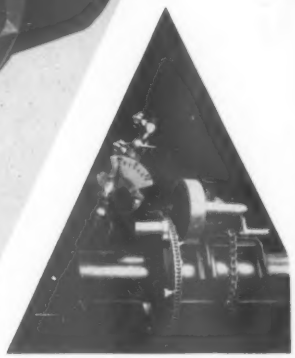

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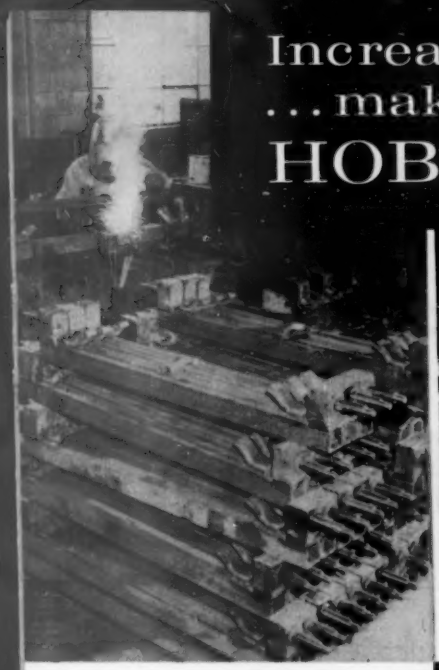

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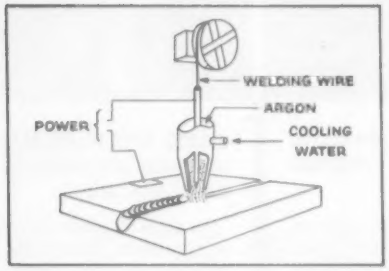
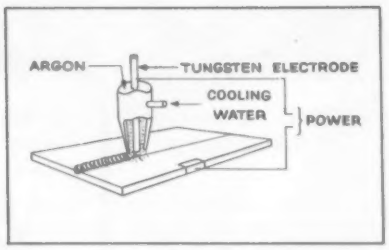
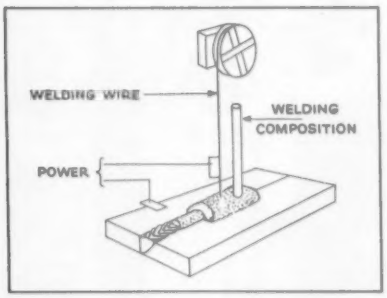


SIGMA Welding—Fastest growing fusion welding method . . . arc is maintained in a shield of argon gas between the consumable electrode filler metal and the workpiece. Welds nearly all commercial metals over ⅛-in. thick manually, and down to 0.050-in. thick automatically.



HELIARC Welding—Makes high quality welds in *any* commercial metal. Uses a non-consumable tungsten electrode in a shield of argon gas. Filler metal may be added to the weld if needed. Since no flux is used, finishing is not necessary.



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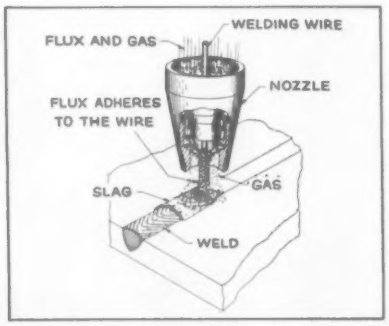

UNIONARC Welding—Uses new concept of magnetically coating wire with flux at the torch nozzle. Makes high-quality welds in all positions. Also used effectively to repair defects developed during casting or riser-removal on heavy carbon steel castings.

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America's pioneer publication which, combined with The Acetylene Journal, has been devoted to the interest of the welding and allied industries since 1898

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Welding of dissimilar metals 5

Joining dissimilar metals has always been a problem in the welding industry and higher-than-normal standards have compounded the difficulties. However, knowing the requirements for welding the different metals, and using the properties of nickle-chrome-iron filler metal to full advantage, satisfactory welds can now be produced.

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After the lean months of 1958, the recession-hit welding industry stages a come-back; first reports indicate 1959 holds much promise for recouping sales losses.

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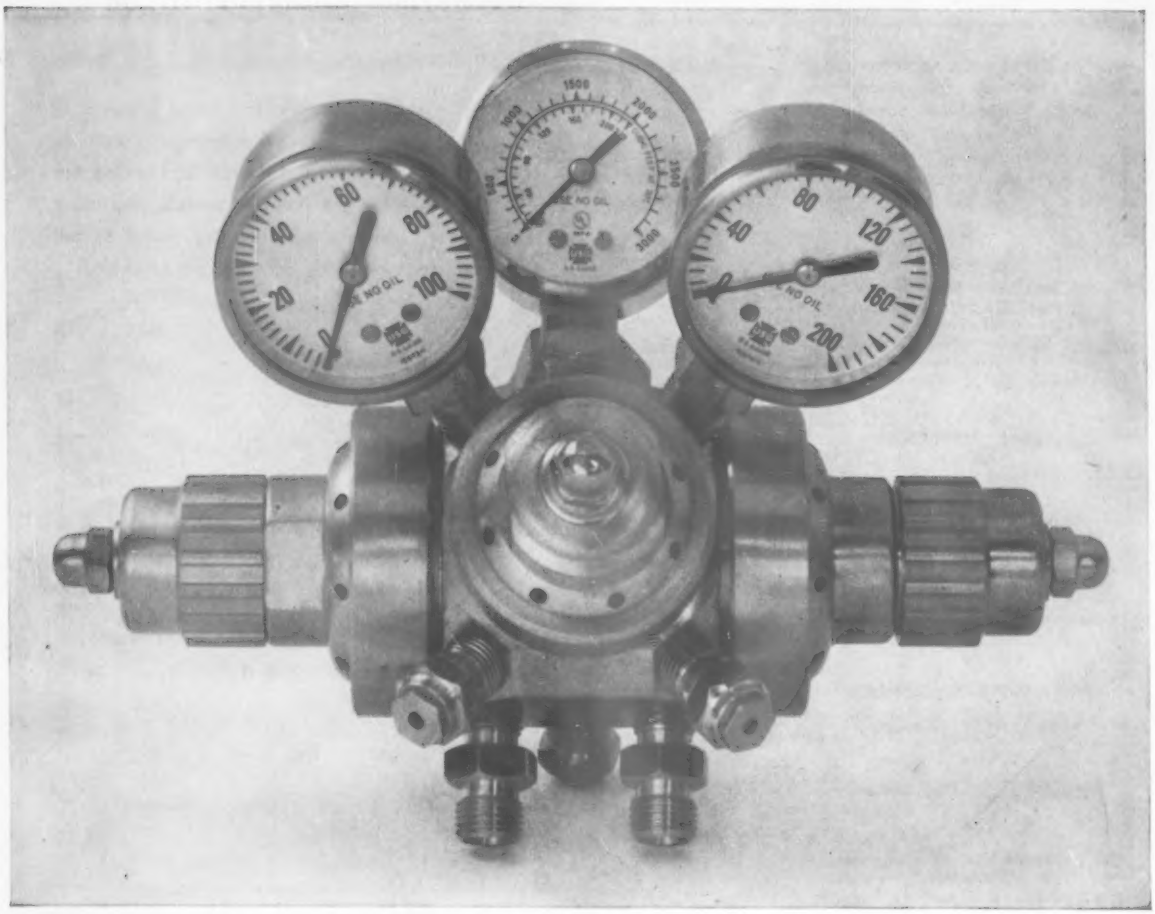
For Three Hose Cutting Torches . . . SEPARATE REGULATION



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Once the bane of the welding industry, and complicated by higher-than-normal standards, joining dissimilar metals now is possible

Welding of dissimilar metals

OBTAINING SOUND, REPRODUCIBLE WELDS in dissimilar metals has become more an art of trial and error than a predictable science.

When joining two or more different metals, a certain amount of weld metal dilution is always present. And if the filler metal cannot absorb these dilutions without harmful results, any number of undesirable effects will appear in the weld.

Any one of these effects (brittleness; air hardening; micro-cracking; loss of strength, ductility or oxidation and corrosion resistance) is serious enough in normal welding—but even more so when welding dissimilar metals.

By its very nature, joining dissimilar metals usually implies rigid performance from the equipment being welded, and the weld must give excellent performance. Several general rules have been proposed—but are far from adequate.

One such rule states filler metal composition should match the highest alloy of those metals being joined. This holds true in some cases; however, an undesirable deposit frequently results when filler is diluted with lower alloy base metal, *e.g.*, carbon steel to 18/8 stainless steel.

If 18/8 filler is used, the resulting weld may be air-hardenable, and therefore brittle. A high alloy filler such as 25/20 stainless has often been recommended, and under most conditions will provide a ductile, austenitic weld. However, welds inherently sensitive to micro-cracking often result.

Other stainless steels have also been used. When a proper balance is maintained among all constituents of a stainless weld, a small amount of ferrite is deposited in an otherwise austenitic weld, producing a crack-resistant joint.

Unfortunately, the weld exhibits other undesirable properties, primarily a very brittle structure (sigma phase) which develops in high temperature service.

When high alloys other than stainless are involved, electrode selection becomes more complex.

Estimating dilution and the resulting composition is necessary. Also important is the weld metal's coefficient of thermal expansion relative to that of the base metal

Element	Inco-Weld "A" Electrode (all weld metal deposits)	Inco-Weld "A" Wire
Carbon	0.15 max.	0.10 max.
Manganese	1.0 - 3.5	2.0 - 2.75
Iron	6.0 - 12.0	10.0 max.
Sulfur	0.02 max.	0.015 max.
Silicon	0.75 max.	0.35 max.
Copper	0.5 max.	0.50 max.
Titanium		2.50 - 3.50
Chromium	13.0 - 17.0	14.0 - 17.0
Columbium	1.0 - 3.0	
Molybdenum	0.5 - 2.0	
Nickel Cobalt	Balance	67.0 min.
Cobalt (if determined)		1.0 max.

TABLE 1—Limiting composition suitable for specification purposes.

(particularly when thermal cycling will be involved in service).

A weld having an expansion coefficient between those of the two metals being joined is desirable in minimizing stresses caused by temperature change.

To overcome these numerous problems, filler metals for welding dissimilar metals require the following properties:

(1) High tolerance for dilution by elements (iron, nickel, chromium, copper) without formation of brittle or crack-sensitive alloys.

(2) Moderate coefficient of thermal expansion.

(3) Ability to withstand high service temperatures over long periods without suffering harmful effects (sigma phase, carbon migration).

(4) Good oxidation and corrosion resistance.

(5) High strength and ductility at both high and low temperatures.

With these requirements in mind, International Nickel Co., Inc., developed the electrode and filler wire registered under the tradename of Inco Weld "A."

This material was used in many test situations and in extensive production and maintenance applications. As a result, a large majority of difficult dissimilar metal welding problems were solved satisfactorily.

Successful applications included ferritic and austenitic combinations, low alloy and mild steels and high-nickel alloys.

Both the wire and electrode have a modified alloy composition of nickel, chromium and iron. Flux-coated electrodes are designed for manual metal-arc welding with d-c reverse polarity. Wire comes in straightened and

	Inco-Weld "A" Electrode		Inco-Weld "A" Wire	
	1/8" dia.	5/32" dia.	As Welded	Annealed 1650°F/2 hrs. Aged 1300°F/20 hrs.
Hardness	Rb 80	Rb 80	Rc 3	Rc 27
Elong., %	45	43	42	12
Yield (psi)	52,400	52,300	56,000	80,000
Tensile (psi)	92,500	91,200	94,000	122,000

TABLE 2—Typical mechanical properties of all weld metal deposits.

cut lengths, and on spools for Mig or Tig welding.

Although electrode deposits do not respond to heat treatment, wire deposits are age-hardenable and a heat treatment will increase tensile strengths. Optimum properties can be attained by stress relieving at 1,650 F for two hours and aging at 1,300 F for 20 hours.

Coefficient of thermal expansion of these nickel-chrome-iron materials shows a favorable relation to ferritic-stainless, carbon and austenitic-stainless steels. This coefficient minimizes thermal stresses in joints between metals having widely divergent coefficients.

The following examples, picked to show the range of metals successfully welded and the differences in operating conditions, illustrate the latitude and versatility of these NiCrFe electrodes and wires.

Type 304 stainless steel was welded to mild steel in fabrication of a chemical conveyor. Because the equipment transports magnesium-chloride flakes at 1,200 F, a highly corrosive condition was added to the normal problem of welding the dissimilar metals.

The conveyor consists of two troughs, an inner one carrying the chemical; outer one, a water coolant. High heat, cold water and corrosive action have not affected the weld since the conveyor was put in operation.

T-1 steel was welded to 304 stainless in a large test chamber, which is subjected to successive heating and cooling from room temperature to 600 F. The NiCrFe electrode joined the two dissimilar metals, and the T-1 steel to itself, without difficulty.

An oil eliminator's mild steel end cap was joined to a 304 stainless outer casing. Oil in the eliminator is subject to high pressure and sub-zero temperatures. At 50 F and 500 psi, the welds still maintain their ductility.

Three metals were welded together in a pressure vessel which previously had contained numerous weld failures. The vessel shell was A-302-B stainless; the lining was 5% chrome; and the baffle bar, to be welded to the shell, was 405 stainless. Using the nickel-chrome-iron filler, welds showed no cracking after penetrant testing.

T-1 STEEL was welded to 304 stainless in a large test chamber which is regularly subjected to temperature changes ranging from room temperature to 600 F.

SPECIAL-purpose furnace muffle had to be made to exacting specification. Modified NiCrFe wire and electrode were used to join steel flange to the Inconel body.

Similarly successful applications were accomplished with NiCrFe wire. For example, mild steel flanges were joined to an Inconel vacuum retort used for heat-treating rare metals. The high heat and vacuum demanded high quality welds, which were obtained.

The Monel end-ring of a hospital sterilizer was welded to a nickel-clad shell. The sterilizer, made on a production basis, must withstand corrosion, heat and pressure.

Carbon steel flanges, the nickel-clad shell and the solid nickel bottom of a caustic evaporator were welded using this filler wire. Corrosion and heat added extreme service demands to the already difficult welding conditions.

Heavy steel flange and a large special-purpose Inconel furnace muffle were also joined with this wire. Because of special operating conditions, the muffle had to be fabricated to unusually exacting specifications.

In operation the muffle's alloy body reached 2,050 F while the steel flange remained relatively cool. The muffles were fabricated on a production basis, using the Mig process to weld the Inconel to the ordinary steel and to itself.

Welding with the NiCrFe type electrode and wire does not require extraordinary care—but there are certain do's and don'ts which must be observed, notes Inco.

When making joints between dissimilar metals, the weldor should consider each joint member. In most cases, no preheat or postheat is required. However, where necessary under normal welding conditions (to obtain required mechanical properties in either or both joint members), such treatment should be applied.

Joints should be properly cleaned before welding. All oil, grease, paint, marking crayon or sulphur-bearing machining lubricants must be removed.

No beveling is necessary for welding materials up to 0.109 in. thick. For thicker materials, up to ⅜ in., a single Vee joint preparation with an 80 deg minimum included

Base Materials	Hardness of Weld Rb	Longitudinal Bend Test, % Elong. in 1/2"	Tensile Strength psi	Location of Failure
Mild Steel - 304	83	38	71,900	Mild Steel
Mild Steel - 405	79	42	67,100	Mild Steel
Croloy (2-1/4 Cr,1/2 Mo) - 347	79	41	84,100	Croloy
304 - 410	79	35	80,000	410
405 - 330	78	34	81,200	330
Mild Steel - Croloy	79	30.6	68,600	Mild Steel
Hastelloy "C" - 316	85	38.8	90,500	316
Monel - 410	80	38.4	81,830	Monel
Inconel - 347	82	33.3	95,100	Inconel
Inconel - 405	84	43.1	90,800	405

TABLE 3—Typical properties of butt welds in dissimilar materials made with the modified nickel-chrome-iron electrode.

angle is recommended.

For thicknesses more than 3/8 in., a U or double-Vee joint preparation is preferred. U-grooves should have 3/16 to 5/16 in. root radius and a 15 deg side angle. For J-grooves, a 1/2 in. root radius with 15-25 deg side angle is recommended. (When Mig welding a standard U-joint, root radius should be lessened about 50% and the included angle doubled.)

When Tig welding (either manual or automatic) d-c straight polarity is recommended. However, a-c can be used for automatic welding where close control of arc length is possible. (Superimposed high-frequency or 120 cycle equipment is required with a-c.) For Mig welding, d-c reverse polarity should be used.

In metal-arc welding, the downhand position should be used with currents within the recommended amperage ranges given below.

Use of currents higher than those recommended will cause erratic arc behavior, electrode overheating and waste due to excessive stub lengths.

Base Materials	Hardness of Weld	Longitudinal Bend Test, % Elong.	Tensile Strength psi	Location of Failure
347 - Monel	82 Rb	38	85,600	Monel
405 - Inconel	85 Rb	37	90,000	405
347 - Incoloy	86	36	90,600	Incoloy
347-Inconel	85	40	94,900	347 fusion line
410 - Monel	79	43	81,800	Monel
Stellite 31 - Inconel X	6-15 Rc	18	107,250	Weld & Stellite
*Stellite 31 - Inconel X	*27-34 Rc	*5.8	*122,000	*Stellite
Stellite 21 - 19/9 DL	13-16 Rc	-	104,900	Stellite

* Heat treated after welding as follows: - Stress relieved at 1625-1650°F for 2 hours and air cooled, then aged at 1300°F for 20 hours.

TABLE 4—Typical properties of butt welds in dissimilar materials made with the modified nickel-chrome-iron wire.

STAINLESS steel water-cooled jacket, steel flange, and Inconel plate were joined in fabrication of a dry hydrogen retort for brazing at 2,100 F, and bright annealing.

Electrode diameter	D-c reverse polarity
3/32 in.	40-65 amp
1/8 in.	75-100 amp
5/32 in.	90-130 amp
3/16 in.	110-150 amp

For vertical and overhead welding, amperage should be lowered 10 to 20 amp from normal flat position current. Vertical welding of metal thicker than 0.109 in. should be done from the bottom up using only d-c reverse polarity. Best control is obtained with a short arc.

Consideration should also be given the composition resulting from welding dissimilar metals. Many times electrode or wire diameters will have a marked effect on weld chemistry.

Diameter selection should be based on the effects of dilution from either or both joint sides. In most cases, 25% dilution is not harmful, but excessive dilution from high-copper-content alloys should be avoided. The 3/32 and 1/8 in. electrodes are preferred for welding in all positions other than downhand or flat positions.

Wire for Mig welding is available in 0.035, 0.045 and 0.062 in. diameters. Tig welding wire comes in 1/16, 5/64, 3/32, 1/8 and 5/32 in. diameters.

Either pure helium or argon can be used for Tig welding, while pure argon (or a helium-argon mixture with 15-20% helium added) is recommended for Mig.

In Tig welding, gas flow will range from 10 cfh for light gage material, to as much as 40 cfh on materials 1/8 in. thick and heavier. Tungsten electrodes alloyed with thorium are recommended.

Better arc control can be obtained if the tungsten electrode is dressed to a pencil point. Electrode extension beyond the gas cup should be kept as short as consistent with the joint type being welded.

For example, a maximum extension beyond the gas cup of 3/16 in. might be used for butt joints in light gage material, while an extension of approximately 3/8 to 1/2 in. might be necessary on some fillet welds.

The tungsten electrode or torch should be held in a forehand welding position and filler metal added carefully to avoid contact with the tungsten and subsequent contamination of the electrode.

The ideal torch position is perpendicular to the work. However, in manual welding, the torch may be inclined about 20 deg away from the welding direction to permit better visibility of the molten metal.

In Mig welding, gas flow will range from 35 to 100 cfh. Gas flow rate will be influenced by joint type and location, and the welding amperage being used.

Rate of wire feed and current density must be kept in the proper balance to control the burn-off point and the arc length. The balance should be adjusted to provide a burn-off point about 1/4 to 3/8 in. beyond the gas cup

Base Metal	Test Temp. °F.	Elong., %	Stress, psi	Location of Failure
AISI 502 (5 Cr - .5 Mo)	900	20.3	49,300	Base Metal
502	1100	29.7	33,900	Base Metal
502	1350	53.1	13,100	Base Metal
AISI 505 (9 Cr - 1 Mo)	900	-	53,800	Base Metal
505	1100	37.5	36,100	Base Metal
505	1375	45.3	13,900	Base Metal
*Stellite 31 - Inconel X	Room	2.25	122,000	Stellite
*Stellite 31 - Inconel X	1350	6.0	94,451	Fusion line
Stellite 21 - 19/9 DL	Room	7.0	104,900	Stellite 21
Stellite 21 - 19/9 DL	1200	18.0	71,300	19/9 DL
Stellite 21 - 19/9 DL	1350	16.0	54,250	19/9 DL

* Heat treated after welding as follows: Stress relieved at 1625-1650°F for 2 hours and air cooled, then aged at 1300°F for 20 hours.

TABLE 5—Short time elevated temperature properties of joints made with modified NiCrFe filler material.

Base Metal	Test Temp., °F.	Time to Rupture, Hours	Elong., %	Stress, psi	Location of Failure
All Weld Metal	1000	16	19.2	60,000	
Tests Using	1000	860*	-	45,000	No failure
Inco-Weld "A"	1200	216.2	1.1	26,000	
Wire	1200	860*	-	18,000	No failure
	1350	862.3	2.4	14,000	
	1350	525*		9,000	No failure
	1500	248.6	5.7	9,000	
	1500	597.5	3.7	7,000	
AISI 502	900	34.4	29.0	36,000	Base Metal
(5 Cr, .5 Mo)	1100	14.1	50.0	18,000	" "
	1350	25.0	55.0	5,000	" "
	900	128.8	34.0	32,000	" "
	1100	108.3	47.5	14,000	" "
	1350	141.4	-	3,500	" "
AISI 505	900	21.0	29.0	43,000	Base Metal
(9 Cr, 1 Mo)	1100	18.2	40.0	19,000	" "
	1350	18.7	47.0	6,000	" "
	900	148.4	30.0	39,500	" "
	1100	203.9	45.0	14,000	" "
	1350	124.9	38.5	4,000	" "
Stellite 21 -	1200	88.6	6.0	45,000	Weld
19/9 DL	1200	140.8	2.5	40,000	Weld
	1350	48.9	4.0	28,000	19/9 DL
	1350	186.0	3.0	25,000	Weld
	1350	303.0*	-	20,000	No failure

* No failure occurred - specimen removed from test at end of time shown.

TABLE 6—Stress rupture strengths of joints made with NiCrFe filler.

with an arc length of approximately ¼ in. Shorter arc lengths will cause spatter.

When these adjustments are made properly, the arc will be quiet and spatter-free. Use of constant-voltage machines may help eliminate and control some of these variables.

One of the most impressive features of Mig welding is the mechanical metal transfer from electrode to weld puddle. At a certain minimum amperage (transition point) metal transfer across the arc will change from large globular drops to a spray of fine particles.

This transition point is important as a division between settings for welding and overlay work. Welding procedures usually require a wire feed current density above the transition point to obtain proper penetration and flat bead contour.

Values below the transition point are more useful in overlay work since the lessened energy input minimizes penetration and the globular transfer provides a higher bead.

Bead width or weave should be well within inert-gas limits to avoid puddle oxidation or gas absorption from the ambient atmosphere. For some automatic operations, use of a trailing cup will provide additional gas coverage and hold oxidation to a minimum.

When using Tig, Mig or metal-arc welding, any crater cracks or shrinkage voids should be completely ground or chipped to sound weld metal before restriking. (Crater areas and weld beads should be vigorously wire brushed before making restrikes or laying the next bead.)

When metal-arc welding, a T-type pick-up should be used for the restrike. This consists of starting the arc at the crater's forward or leading edge and carrying the arc to the rear edge at a drag bead speed. On reaching the rear edge, weaving should start, direction of welding should be reversed and the weld continued.

As the arc makes its second or weaving traverse of the crater, the short drag bead will be remelted. This type of pick-up has three major functions: *(1)* it gives the weldor an opportunity to establish correct arc length; *(2)* it preheats the crater; and *(3)* any cold shuts or gas pockets present are given a chance to escape.

These NiCrFe materials have also been used extensively in joints where metal is being welded to itself. Because of

Properties of Metals

Metal or Alloy	Wt/cu ft	Specific Gravity	Melting Point F	Yield Strength	Tensile Strength	Elongation	Brinell Hardness	Modulus of Elasticity 10^6 psi	Thermal Conductivity Btu/sq ft hr/°F/in.	Electrical Conductivity %Copper	Electrical Resistivity Ohms/cmf	Coefficient of Expansion °F x 10^{-6}
Aluminum, 99%	165	2.72	1220	5,000	13,000	35	23	10.2	1570	59.0	17.6	13.8
Antimony	417	6.67	1166				30	11.2		4.0		6.7
Arsenic	367	5.72	1497							4.5		2.14
Bismuth	612	9.8	520				9	4.6		1.3	670	7.47
Brass, Yellow	535	8.6	1660	18,000	40,000	60	60	14.0		26.0	40	
Bronze, Aluminum	481	7.7	1905	30,000	76,000	55	125	15	173	15.0	80	16.5
Bronze, Manganese	522	8.38	1598	·25,000	60,000	30	100	15	700	25.0	42	11.7
Bronze, Tobin	535	8.6	1625	24,000	54,000	40	100	15	810	25.0	42	11.9
Cadmium	540	8.64	1610		9,200	20	20	7.1		34.0		16.6
Chromium	419	6.7	2740				350			55.0		4.5
Cobalt	550	8.8	2700		35,000		125			16.0		12.4
Copper	557	8.93	1981	10,000	32,000	40	30	15.8	2680	100.0	10.4	9.8
Everdur	534	8.57	1866	20,000	55,000	50	95	15.0				9.6
Gold	1204	19.3	1945		17,000	45	25	13	2000	71.0	14.6	7.8
Inconel	530	8.51	2540	35,000	85,000	45	150	31	104		590	6.4
Iron, Cast	450	7.22	2300		25,000	0.5	180	13	310	2.9	400	6.0
Iron, Malleable	462	7.42	2300	37,500	57,000	22	110	12.5				6.6
Iron, Pure	490	7.86	2795	19,000	38,000	45	67	30.1	470	17.5	57	6.8
Iron, Wrought	480	7.76	2750	27,000	40,000	14*	97 to 105	29.0	418	15.0	87	6.7
Lead, Chemical	710	11.4	620	1,900	2,500	50	5	2	240	8.0	124	16.4
Lead, Tellurium	707	11.34	620	2,200	3,000	45	6	2	240	8.0	124	16.4
Magnesium, 99%	108	1.74	1240	13,000	25,000	4	40	6.5	1090	37.0	27	14.3
Manganese	475	7.3	2246		130,000	60	200			35.0	29	12.8
Molybdenum	651	10.3	4532	100,000	140,000		147	50.2		35.0	29	3.1
Monel	551	8.84	2400	35,000	75,000	40	125	26	180	3.6	290	7.8
Nichrome	517	8.19	2460	50,000	70,000	5	170		135	1.5	675	13.7
Nickel, 99%	556	8.91	2650	8,500	46,000	28	85	30	575	18.8	57	7.4
Nickel Silver 18	546	8.75	2030	20,000	58,000	40	90	18.5	230	8.3	17.5	10
Platinum	1330	21.4	3218	10,000	24,000	24	25	24	480	15.0	64	4.9
Silicon	147	2.34	2588					16.5		1.6	650	3.5
Silver	655	10.5	1762	8,000	23,000	50	30	10.5	2900	106.0	9.6	10.6
Steel, 0.15C	490	7.85	2700	40,000	60,000	35	130	30.0	460	14.5	72.0	6.7
Steel, 0.30C	490	7.85	2600	52,000	84,000	24	170	30.0	460	14.5	72.0	6.7
Steel, 0.50C	490	7.83	2500	72,000	98,000	26	201	30.0	460	14.5	72.0	6.7
Steel, Manganese	495	7.93	2450	75,000	118,000	22	300	29.0				6.7
Steel, Nickel (2330)	490	7.85	2600	84,000	105,000	25	217	30.0				6.7
Steel, Cast	490	7.85	2600	40,000	72,000	26	140	30.0	400	16	60	6.7
Steel, Stainless (304)	495	7.93	2550	35,000	85,000	55	160	29.0		2.0	460	9.3
Tin (Cast)	458	7.28	450	1,710	3,130	70	5.9	7.1	455	13.5	69	11.7
Titanium	281	4.5	3270				230	12.1				4.0
Tungsten	1191	19.1	6152		500,000			51		31.0	33.1	2.2
Vanadium	380	6.0	3182									5.6
Zinc	447	7.14	786		20,000	60	35	18.5		30.0	34	18.0

* Elongation in 8 in.

Base Metal	Preheat	Postheat	Location of Test	Test Temp., °F	Impact Value Foot Lbs.
3-1/2% Ni Steel	400°F	1150°F/1 hr.	Weld Metal	-160	51.2(1)
"	400°F	"	Heat Affected Zone	-160	22.2(1)
"	None	"	Weld Metal	-160	28.1(1)
"	"	"	Heat Affected Zone	-160	10.6(1)
9% Ni Steel	175-250°F	None	Weld Metal	70	38.5
"	"	"	Heat Affected Zone	70	35.0
"	"	1075°F/1-1/2 hr.	Weld Metal	70	38.0
"	"	"	Heat Affected Zone	70	30.0
"	"	None	Weld Metal	-320	33.7(2)
"	"	"	Heat Affected Zone	-320	33.7(2)
"	"	1075°F/1-1/2 hr.	Weld Metal	-320	37.7(2)
"	"	"	Heat Affected Zone	-320	31.7(2)

(1) Average of 6 tests.
(2) Average of 2 tests.

TABLE 7—Impact properties at low temperatures of joints made with the modified nickel-chrome-iron filler material.

its composition, it is suitable for joining nickel-iron-chrome alloy to itself, and for joining certain alloys normally considered difficult to weld, or where high or low temperature impact strengths are important.

A typical application is the joining of chrome-moly steels (502 and 505) when high temperature service is involved. Resulting welds show good stress rupture properties and no carbon migration. Another application is in welding 3½% and 9% nickel-alloy steels for low temperature service.

Laboratory and field testing data on the weld properties obtained with these nickel-chrome-iron materials indicate they are meeting, and in many cases exceeding, their design expectations. Mechanical properties have surpassed the properties of the base metal in most cases.

[Data on the weldability of dissimilar metals when using resistance or gas processes can be found in the table below and in the WELDING ENGINEER Data Sheet on the succeeding page.—*Ed.*]

Resistance welding dissimilar metals

Various materials respond differently when submitted to a specific welding method. This difference in response is dependent upon the inherent characteristics of a metal or alloy type, and will arise even among metals within a distinct classification.

The weldability of various metal combinations when using a resistance welding process is shown in this table. For example: resistance welding stainless steel to galvanized iron is given a "B" rating, which is considered good. On the other hand, welding galvanized iron to nickel produces fair results, while nickel-silver gives very poor results.

The link between metallurgical characteristics and weldability of various metals must be understood before attempting to weld them with the resistance processes. A comprehensive article on this phase of resistance welding dissimilar metals was published in WELDING ENGINEER, *"Resistance welds will improve. . .", December, 1958, p. 54.*

Weldability of various metal combinations

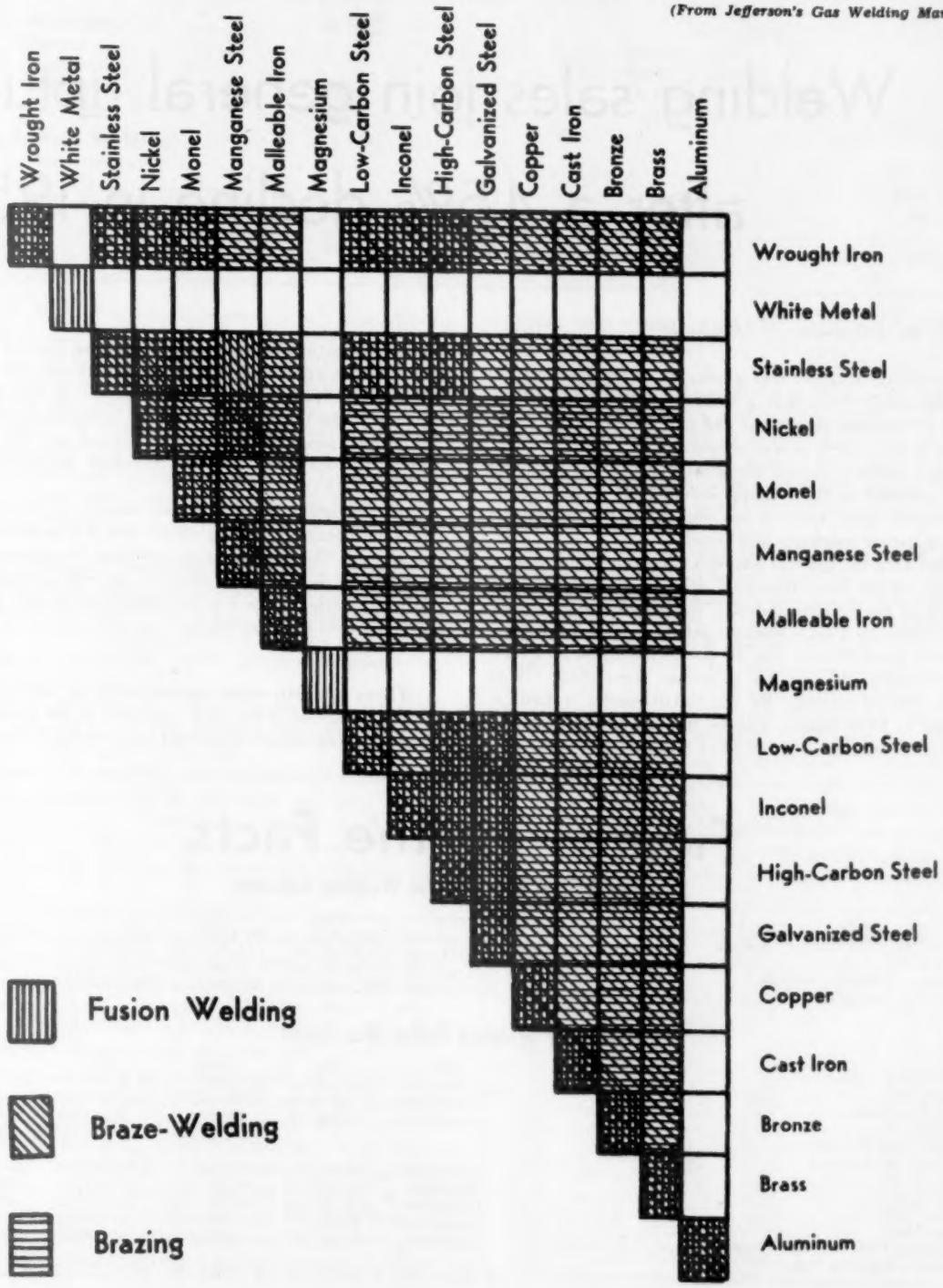
	Aluminum	Stainless	Brass	Copper	Galvanized iron	Steel	Lead	Monel	Nickel	Nichrome	Tin plate	Zinc	Phosphor bronze	Nickel silver	Terne plate
Aluminum	B	E	D	E	C	D	E	D	D	D	C	C	C	F	C
Stainless	F	A	E	E	B	A	F	C	C	C	B	F	D	D	B
Brass	D	E	C	D	D	D	F	C	C	C	D	E	C	C	D
Copper	E	E	D	F	E	E	E	D	D	D	E	E	C	C	E
Galvanized iron	C	B	D	E	B	B	D	C	C	C	B	C	D	E	B
Steel	D	A	D	E	B	A	E	C	C	C	B	F	C	D	A
Lead	E	F	F	E	D	E	C	E	E	E	F	C	E	E	D
Monel	D	C	C	D	C	C	E	A	B	B	C	F	C	B	C
Nickel	D	C	C	D	C	C	E	B	A	B	C	F	C	B	C
Nichrome	D	C	C	D	C	C	E	B	B	A	C	F	D	B	C
Tin plate	C	B	D	E	B	B	F	C	C	C	C	C	D	D	C
Zinc	C	F	E	E	C	F	C	F	F	F	C	C	D	F	C
Phosphor bronze	C	D	C	C	D	C	E	C	C	D	D	D	B	B	D
Nickel silver	F	D	C	C	E	D	E	B	B	B	D	F	B	A	D
Terne plate	C	B	D	E	B	A	D	C	C	C	C	C	C	D	B

Code:
A - Excellent; B - Good; C - Fair; D - Poor; E - Very Poor; F - Impractical

Gas welding of dissimilar metals

GAS-WELDING processes you may select in order to join a given material to a similar or dissimilar metal. As an example, take malleable iron. You can fusion weld it only to itself, but you can join it to everything except aluminum, magnesium, or white metal by using either brazing or braze welding. Aluminum, as another example, can be joined only to aluminum, but either fusion welding, braze-welding or brazing may be employed.

(From Jefferson's Gas Welding Manual)



Recession-hit industry stages come-back . . .

Welding sales join general upturn after a 4.5% decline in 1958

by **T. B. Jefferson** . . . *Publisher*

ECONOMICALLY, 1958 was a year of sharp contrast. At its beginning, there was a definite downward readjustment of business conditions and many were ready to describe it as a fairly severe recession.

This condition started about August of 1957, and was soon reflected in the welding industry. It continued uninterrupted until April of last year when the adjustment reversed itself suddenly and rapidly.

From then on, general business conditions improved to the end of the year. However, this was not wholly true, insofar as the welding industry was concerned.

In reviewing 1958's business activity, we find the gross national product—the sum of goods produced and services rendered—decreased to an annual rate of $429 billion in the second quarter. By the third quarter it had increased to $439 billion, and by the end of the year had reached an all-time high of $453 billion.

Investigation of individual income showed that it continued at approximately the same high rate during the first half of 1958 as was enjoyed in 1957. It, too, zoomed upward in the third quarter to reach a new high of $357.5 billion. Disposable income, the amount available after federal income taxes, likewise increased during the year to a record $314 billion.

The upward turn of business during the last half of 1958 has continued during 1959—but at a moderate rate. As a result, the country is exceedingly prosperous.

But there is one threat to all of us—the possibility of further inflation. It is not inevitable, but strong, preventive measures must be taken.

There are two main causes which we, as taxpayers, should recognize. First, and foremost, is the tremendous spending program of the federal government. Even though

Figures for the Facts

How the Dollars Went in the Welding Industry

	1954	1955	1956	1957	1958
Gas Welding and Cutting Industry	$365,640,643	$472,464,469	$604,993,811	$629,138,459	$629,856,801
Arc-Welding Industry	135,933,996	179,982,555	250,912,182	246,967,615	219,604,905
Resistance-Welding Industry	37,321,291	50,312,245	73,963,420	67,711,615	52,273,435
Welding Industry Totals	$538,895,930	$702,464,469	$929,869,413	$943,817,077	$901,735,141

How Your Welding Dollar Was Spent

	1954	1955	1956	1957	1958
Arc-Welding Industry					
Machines	$ 33,043,167	$ 42,984,162	$ 54,589,837	$ 45,389,621	$ 37,384,204
Arc Electrodes	87,881,398	119,063,630	144,066,992	149,497,349	134,568,496
Accessories	15,009,431	17,934,761	22,987,623	21,743,802	18,327,622
Argon and Helium			29,267,730	30,336,843	29,324,583
Gas-Welding Industry					
Oxygen	123,949,000	162,932,174	252,766,844	246,583,471	578,294,032
Acetylene	198,369,000	261,419,570	286,874,321	317,844,381	257,664,602
Gas Totals	322,318,000	424,351,744	539,641,165	564,427,852	320,629,430
Apparatus	26,830,794	30,681,422	41,966,043	43,025,661	32,340,647
Welding Rod and Accessories	16,491,849	17,136,503	23,386,603	21,684,946	19,222,122
Resistance-Welding Industry					
Apparatus, Controls and Electrodes	$ 37,321,291	$ 50,312,245	$ 73,963,420	$ 67,711,003	$ 52,273,435

How the Welding Dollar was divided

FOR:	Total Industry	Arc Welding	Gas Welding	Resistance Welding
Arc Welding	24.36%			
Machines		17.02%		
Electrodes		61.27		
Accessories		8.34		
Argon & Helium		13.37		
Gas Welding	69.85%			
Oxygen			40.90%	
Acetylene			50.90	
Apparatus			5.14	
Accessories & Rods			3.06	
Resistance Welding	5.79%			
Machines				80.49%
Controls				7.65
Electrodes				11.86
	100%	100%	100%	100%

each of us is faced with high income taxes, it is estimated that our country will have a deficit of approximately $12 billion for the fiscal year ending this month.

And there is a likelihood of another deficit of substantial size for the next fiscal year.

Our only hope of operating on a balanced budget is to urge Congress to reduce expenditures.

The second cause for inflation is the continual increase in wages year after year, which are not matched by greater productivity.

The factors of inflation have affected the welding industry because users of welding could buy fewer pounds of electrodes for each dollar spent. The dollar volume of electrode sales did not fall off nearly as much as might be expected in view of the drastic decrease in pounds of electrodes produced in 1958.

For this reason, the arc welding industry was fortunate. During the year it experienced price increases that very nearly offset decreased production.

However, this condition was not true of the gas-apparatus and resistance-welding industries, and as a result, their dollar volume suffered with curtailed production. While welding industry sales fell below 1956-57 totals, they still exceeded $901 million to show a 70% increase over 1954.

The only phase of the welding industry to show a gain last year, was the gas-welding and cutting industry. Here an $11 million loss in apparatus, accessory and rod sales was offset by a $14 million gain in gas sales. Another huge gain was made in oxygen production, where volume jumped nearly 28% in a year's time. On the other hand, acetylene production practically stood still.

Total sales in the gas-welding industry set an all-time industry high by exceeding the 1958 figure by one-half million dollars, to reach a total of nearly $630 million. The sale of gas-welding apparatus dropped off approximately 25% from the 1957 figure, to exceed only slightly the 1955 sales figure. For the year, the total sales of gas welding and cutting apparatus came to $32.33 million.

The sale of gas welding rods and accessories also slipped. This action continued a trend started in 1956, reducing these commodities to $19.25 million in sales for 1958.

The $578 million spent for gases used in welding was a life-saver for this segment of the welding industry. While acetylene sales were up $3 million over the previous year, oxygen sales showed a gain of more than $11 million. And the gain could have been even higher had it not been for erratic pricing of this commodity during the year.

The variety of uses being found for oxygen and acetylene aside from welding makes us wonder if we should continue to report the sales volume of these gases as part of the welding industry. It is generally conceded that much of the 8 billion cu ft increase in oxygen production registered last year was for combustion supporting fuel for our missile program. Likewise, more and more acetylene production is going into the chemical industry, even though these two gases are still used extensively for heating, joining and severing of metals.

Production-wise, the arc welding industry suffered a severe set-back last year, with electrode production falling from 562 million lb in 1957 to 423 million lb in 1958. In spite of this serious drop, price increases and a

Steel Production in the U.S. 1943-1958

Ingots	Tons	Plates, Shapes & Sheets	Tons
1943	88,836,366	1943	23,219,605
1944	89,641,575	1944	23,498,712
1945	79,701,624	1945	24,681,737
1946	66,602,706	1946	21,396,280
1947	84,783,981	1947	28,492,386
1948	88,533,729	1948	29,215,509
1949	77,868,353	1949	21,670,929
1950	96,713,276	1950	26,983,427
1951	105,134,553	1951	30,826,444
1952	93,156,375	1952	25,498,190
1953	111,609,716	1953	26,889,093
1954	88,311,652	1954	28,002,100
1955	117,382,024	1955	36,097,565
1956	115,216,149	1956	31,430,662
1957	112,714,996	1957	24,130,639
1958	86,254,885	1958	21,170,857

Electrode Production

	Pounds
1943	1,086,784,300
1944	847,937,972
1945	541,829,046
1946	340,029,320
1947	360,098,430
1948	436,359,255
1949	329,596,600
1950	422,287,900
1951	549,327,781
1952	573,376,722
1953	547,614,604
1954	431,263,875
1955	571,284,926
1956	637,576,092
1957	562,020,113
1958	423,216,870

Welding Wire Production

	Electrodes and Wires Pounds
1943	1,133,876,000
1944	890,243,721
1945	589,371,842
1946	370,632,958
1947	388,121,600
1948	467,986,321
1949	352,668,360
1950	450,848,053
1951	587,780,940
1952	607,496,832
1953	580,223,145
1954	460,942,721
1955	604,387,921
1956	677,058,075
1957	627,438,291
1958	457,238,961

trend toward more expensive iron-powder alloyed electrodes resulted in only a $15 million decrease in electrode sales. In view of the reduced steel production last year, it is surprising that electrode production was not off even more.

Although the demand for welding materials was down, the search continued for cost reduction means capable of producing welds at higher speeds. As a result, we saw further trends toward the use of automatic and semi-automatic equipment with carbon-dioxide and inert-gas shielding finding increased uses.

A total of nearly $220 million was spent in the arc welding industry last year. Arc welding machine sales continued to decrease as in 1957, to reach a total of slightly more than $37 billion for the year. This was approximately 20% below 1957 for this type equipment. Accessories used in arc welding dipped to slightly more than $18 million or about 14% below the previous year.

For the first time since 1951, argon gas production failed to show an increase over the previous year. Instead, there was a 5 million cu ft drop, to give a yearly production figure of 372 million cu ft. Helium demand for uses other than welding has become so great that this inert gas is in short supply.

Fortunately for the welding industry, argon and carbon dioxide are satisfactory as shielding mediums. It is impossible to determine how much of the 362,000 tons of carbon dioxide produced in 1958 were used for welding. It is known, however, that gains are being made because of advances in carbon-dioxide shielding for both manual and automatic welding applications.

Resistance welding followed the trends of the other welding processes, turning up a sales total of just slightly more than $52 million for the year. Of this amount, about 80% was for machines. There had been hopes that 1958 might be a banner year for resistance welding because of the extensive tooling anticipated for 1959 automobiles.

Unfortunately, the automotive manufacturers were able to modify many of their production tools to meet model changes without purchasing a number of new welders. Resistance welding manufacturers ran into the same difficulty in the radio, television and home appliance field.

In view of the drastic reduction in steel production in 1958, the welding industry held up remarkably well. Ingot production for the year totaled 86,254,885 tons. This represented a 26 million ton drop from 1957. As a result, steel plates, shapes and sheet production dropped 3 million tons to bring the total to 21,170, 857 tons for the year.

The impact of the upturn, which so many industries enjoyed in the fall of 1958, was fully felt by the welding industry in 1959. Month after month, manufacturers report that a particular month is ahead of the previous month; well ahead of the same month in the previous year; and often the best month in the company's history.

As mid-1959 approaches, some electrode manufacturers report being 30 to 90 days behind in delivery of specific types. Likewise, the demand for capital equipment has been high, so that machine manufacturers in some cases are running to capacity.

Surprisingly, manufacturers of earth-moving and other types of construction machinery have been able to dispose of all the equipment they had in storage yards. They, too, are now running behind in shipments. This fact is important to welding because these machines are welded.

Likewise, the Supreme Court's reversal of the Memphis gas rate case finds the pipeline and oil industry ready to spend millions for expansion. The federal highway plan is finally underway, so that there will soon be a demand for additional welded equipment, as well as welding processes for maintenance.

The only cloud in the sky is the pending steel strike, which, if it does come, will have its effect on welding. Because of the long anticipation period, many industries have been able to stockpile a sufficient amount of steel to keep them in operation for six to eight weeks.

The manufacturers to be most affected by the strike will be those depending on heavy structural shapes for their production activities. Because of the inability of most fabricators to stock a sufficient variety of structural shapes to meet varying conditions, these items will soon be in short supply should a prolonged steel strike result.

Thus, a strike may curtail building and bridge construction.

Last year was not as good a year as we had hoped. During part of it a mild recession was working against us, but even so, we might have been able to turn in a better year had we all done the job of selling welding that we should be doing.

The tide has been turned in 1959. It is our hope that those interested in selling welding will follow through. Are you doing your part?

Gases for Welding

Annual production in cubic feet

	Argon	Acetylene	Oxygen
1953	175,321,000	6,525,000,000	27,573,600,000
1954	186,197,000	6,197,000,000	22,073,600,000
1955	216,314,000	8,204,317,000	29,091,873,000
1956	325,187,000	9,254,000,000	31,602,000,000
1957	377,084,000	10,389,470,000	30,507,382,000
1958	372,924,000	10,696,387,000	38,042,327,000

Top welding articles of 1958-'59

The most popular articles appearing in *Welding Engineer* from July, 1958, through June, 1959, have been abstracted here for your convenient reference. Tear sheets of most of the articles still are available, and will be sent upon request.

BRAZING & SOLDERING

The processes: four have commercial importance today—The eight brazing processes—torch, induction, furnace, dip, resistance, twin-carbon arc, block and flow—are discussed. Special emphasis is placed on torch, dip and induction. The article continues with a run-down of joint designs, fluxes and pre-braze cleaning. *August, p. 30.*

Honeycomb gets new brazing method—Convair's struggle to find a brazing method which would be effective on silver-manganese sheet alloy used in fabrication of supersonic jet planes is detailed. *August, p. 62.*

High quality joints . . . with brazing alloy clad strip—Here's how brazing alloy-clad strip is used in applications where the fabricator is looking for 100% joint coverage, high joint strength, void-free deposits and reduced manufacturing costs. *April, p. 79.*

Mixer blades induction brazed at a 1,200-per-hour clip—This article tells how Sunbeam Corp., Chicago, uses an induction heating unit that incorporates a 20-kw generator, work station and conveyor in a single installation to braze the blades of electric mixers. *May, p. 60.*

CONSTRUCTION

Less cost and better appearance through welded bridges—Here is a detailed report by the American Institute of Steel Construction on how costs are slashed through use of welding when building bridges. New York, Kansas and Arkansas structures are used as examples. *July, p. 50.*

Geodesic steel dome is put to its first U. S. industrial use—This picture story shows various stages of construction of the all-welded steel dome built by Union Tank Car Co. in Baton Rouge to house railroad car maintenance facilities. *October, p. 42.*

Unusual design guarantees clear view of sports—A company engineer tells how modern welded haunches are used to replace ancient flying buttresses in building an Evansville, Ind., sports arena with an unobstructed view. *October, p. 56.*

Kaiser plant welds legs for giant offshore tower—The largest welding job ever tackled by Kaiser Steel Corp.'s Napa, Calif., plant—fabrication of four 700-ton legs for a hydraulically-operated tower used to expand Los Angeles' sewage system—is viewed in this start-to-finish treatment. *January, p. 36.*

Thousands of precision welds for a sensitive giant—A 175-ton giant is standing in the Owens Valley desert south of Bishop, Calif., due to the work of specially-qualified weldors and millwrights. Construction of the structure, a huge radio telescope, is detailed in this article, which is part of an entire issue devoted to construction. *February, p. 29.*

Tubular construction takes hold in Germany—The design advantages of tubular construction are told by one of Germany's leading pipe and steel producers—Phoenix-Rheinrohr A. G. *March, p. 46.*

Pipeline brings first natural gas to Florida—Here's how a 2,596-mile pipeline costing more than $164 million was built from McAllen, Tex., to Miami to carry more than 282 billion-cu-ft of gas per day to Florida. *May, p. 32.*

DESIGN

Cars will soon cross new aluminum bridge—If you want to know how the world's first highway bridge constructed with aluminum girders was erected—read this article. It concerns the four-lane, 222-ft long structure near Des Moines. *August, p. 54.*

Easier living . . . through welding—A representative of the O. Ames Co., Parkersburg, W. Va., tells how his company's engineers produce chairs, tables and ottomans by welding ¾-in. steel tubing. *August, p. 58.*

Shift to welded joints for small diameter pipe—This report compares and contrasts mechanical and welded pipe joints to point-up reasons why pipe fabricators are indicating an increasing preference for the stronger, less costly joints made possible by welding. *September, p. 52.*

Welding, aluminum, ancient principle . . . all used when erecting Reynolds-Baroni bridge—Dr. Giorgio Baroni designed a welded aluminum bridge which gets its unusual strength from the use of the arch. The testing of the bridge's prototype, and welding specifications are detailed here. *February, p. 48.*

Army testing all-welded aluminum bridge trusses—The special design of an all-welded aluminum bridge truss for use in military tactical bridges is described in this article. *March, p. 67.*

FABRICATION

Mig and Tig used to weld dynamite mixers—They just don't make mixing bowls like they used to—especially if dynamite has to be mixed. Here is a detailed account of how Mig and Tig welding methods were applied to this unusual job. *July, p. 37.*

Braze-welding saves an anvil—The author tells how 10 weldors, 72 man-hours and 2,350 lb of bronze welding rod were used to successfully and economically repair a cracked 60-ton anvil. *September, p. 38.*

Fine mesh screen can now be Tig welded with a new set-up—In this article, a machine set-up is described which was designed to Tig weld screen of perforated metal into flat sheet, cylinders and cones, or other regular shapes without altering hole shape, spacing or continuity. In the specific operation detailed, non-slip cloth covered with small neoprene protrusions is manufactured. *January, p. 50.*

Army's Redstone and Jupiter missiles are on target—All but the most highly classified areas of the government-owned plant in Sterling Township, Mich., where Redstone and Jupiter missiles are being produced by Chrysler Corp., were recently opened to the press. Here, the operation is described and the construction of missiles briefly traced. *April, p. 42.*

Electro-molding replaces forged engine components—Lighter, stronger, within closer dimensional limits than castings—this is a description of the locomotive engine components currently

being welded. The electro-molding process is explained in this article. *April, p. 52.*

Cargo contained, water derailed by covered hopper cars hauling products cross-country—This is an account of the equipment and procedures used in constructing Pullman-Standard Car Mfg. Co.'s Super-Jumbo PS2 covered hopper cars. Special attention is given to electrode and machine specifications. *June, p. 48.*

HARDFACING & OVERLAY

Stainless steel overlay coats an "ulcered stomach"—Digesters processed wood chips into paper and pulp with gas and hot liquids, but wall corrosion and erosion was an unwanted by-product. This article tells how a Mig-applied stainless steel overlay corrected the problem. *April, p. 82.*

Hardfacing drill bits—another contribution to the oil industry—Abrasive wear on rotary drill bits, because of their large diameters, has provided welding another opportunity to offer its know-how to the oil industry—this time in the form of hardfacing. A brief history of such operations is described. *May, p. 35.*

INSPECTION & TESTING

A key to non-destructive test symbols—Test symbols developed by the American Welding Society's committee on nomenclature, definitions and symbols are explained and illustrated. *October, p. 70.*

An introduction to non-destructive testing of welds—Here is a report on the main processes in non-destructive testing and how these six groups are applied when testing turbine generator components. *June, p. 54.*

OPERATION

Selection, welding of CrMo alloy steel pipe—In this two-part series, the determining factors in selecting chrome-moly steel pipe and filler metals for welding is reviewed. The second part discusses effects of preheat and post-heat treatments on the welded properties of CrMo pipe. *July, p. 34.; August, p. 42.*

Arc vs. gas welding of gray cast iron—which should it be?—General Motors welding engineers oxyacetylene welded defective gray cast iron castings to salvage them. However, they thought they could cut time and costs of such salvaging by arc welding the castings. Here's how they did it. *July, p. 48.*

Welding Engineering—This is a three part series. First part covers the history and recent developments in arc, gas and resistance welding. The impetus of two wars on welding is considered. Second part: job opportunities and the qualifications of a welding engineer are discussed. Third part: the 37 accepted welding methods are detailed. *August, p. 39; September, p. 44; November, p. 36.*

Titanium: proper shielding equals sound welds—Either the Mig or Tig process may be used to make consistently good welds on titanium sheets, plates and forgings—but only when the good advice presented in this article is followed. *September, p. 40.*

ABC's of weld estimating—Accurate estimates of welding time are an integral and important part of the total welding fabrication picture and should be treated as such, according to this detailed explanation. *October, p. 39.*

Resistance welding procedures and design—In the first part of a two-part article, a metallurgical engineer describes the functions of resistance welding equipment commonly used to join commercially available materials, and the controls which enable this equipment to perform its job accurately. Second half presents materials standards for resistance-welding electrodes. *October, p. 44; December, p. 54.*

A new missile steel offers high strength and toughness—Airsteel X-200, with a 280,000 psi tensile strength when air cooled and tempered, has been experimented with and adapted to missile construction. *October, p. 66.*

Arsenic's effect on mechanical properties of welds in mild steel—Two persons from Armour Research Foundation present results of an investigation to determine the arsenic content of welding fittings made from British and American steel, and this element's effect on welds in these fittings. *November, p. 32.*

Foresee wider scope for CO_2 welding—New horizons for carbon-dioxide Mig welding are seen with the introduction of reactance unit that permits use of lower currents on mild and stainless steels, as well as on aluminum. *November, p. 48.*

Contour welding with a magnetic-tape tracer system—Automation and welding continue to be an unbeatable team in the automobile industry. In this case, complex automobile frame side-rails and crossmembers are welded, aided by a magnetic-tracer. *December, p. 50.*

New metal-blanking process offers labor and cost savings—Metal blanking system, Templet Industrial Process, is said to save as much as 80% of the cost of a conventional die. Here, a staff member reports on the new patented method of metal-blanking. *December, p. 60.*

Swiss rail-welder in production at NCG—A new method capable of saving U. S. railroads millions of dollars annually in track installation and maintenance costs, and providing reduction in freight and stock damage, has joined the list of continuous welded rail systems available. *January, p. 35.*

Producer gives instructions for welding moly—This is a presentation of the informative results of a six-year investigation by universities and aircraft fabricators into the problems of welding molybdenum. *January, p. 38.*

Ultrasonic welding comes of age—Sound waves and their resulting vibrations have been converted to a peace-time use—welding. Described in this article are nine of the most important advantages of ultrasonic welding. *January, p. 52.*

New pipeline welding method makes U. S. debut—Dr. Hans Gunther of Heidelberg recently displayed his pipe welding system to a select audience of oil company executives and pipeline contractors in Houston, Tex. A staff member was on hand when the unit was displayed, and reports what he saw. *February, p. 44.*

Electronic tracing—an additional cost saver for production flame-cutting—Last year the Whiting Corp. in Harvey, Ill., equipped one of its three cutting machines with an electronic tracer. Perfomance evaluation since installation: an almost 10% reduction in overall operating costs when constructing custom-made small production-run parts. *February, p. 56.*

Submerged-arc welding reclaims blooming mill rolls—When obsolete blooming mill rolls were ready to be scrapped, submerged-arc welding came to the rescue. The general foreman reports on this reclamation of the 28-ton giants. *March, p. 38.*

Welding costs are high—here's why!—This is a definitive report on the reasons behind so-called "expensive" welding. Six money-consuming practices are listed and corrective measures outlined. *March, p. 52.*

Electron beam welding—a new development for industry—Highly reactive metals and alloys used in nuclear fuel components can be joined by a new welding process—electron beam. *April, p. 38.*

Vinyl-coated steel sheet introduced to industry—Description, specifications and uses of new vinyl-coated steel sheet are given in article as are the tested welding procedures which can be used on the new product. *April, p. 41.*

Application data on Kaiser's new Mig techniques—Three new methods for Mig welding were first announced in WELDING ENGINEER in 1958. Now, procedures and welding data have been released and are detailed. *April, p. 44.*

Argon pinch-hits for helium in Zircaloy-2 welding operations—When the Bureau of Mines requested consumers to replace helium with another gas whenever possible, the advance manufacturing engineering division of Knolls Atomic Power Laboratory in Schenectady, N. Y., tried to replace argon for helium when welding reactor grade Zircaloy. Here is the results of the experimentation. *April, p. 59.*

Explosive welding and forming open another door for industry—In recent months, use of explosives for bonding, forming and welding has received much attention. A staff member relates his findings after a visit to one pioneer in this new field. *April, p. 61.*

A new unit solves multiple spot welding problems—Compact and powerful, a new welding unit promises to eliminate difficulties in multiple spot welding of thin gage sheet metal. *April, p. 90.*

New system eliminates CO_2 disadvantages—Weld spatter, loss of electrode elements and high-heat input were problems confronted when welding mild and low-alloy steels with carbon dioxide as a shielding gas. With a pulsing arc, however, these disadvantages have been eliminated. *May, p. 46.*

Extruded uranium welding wire proves best—Mig welding of uranium necessitated uranium wire. Here is a discussion of the extrusion of such wire. *May, p. 58.*

Flexible sheet-explosive for metal cutting—After the initial furor created by explosive forming and welding, the inevitable of explosive-cutting and hardening has been brought to fruition with this new development. *June, p. 46.*

Resistance welding of aluminum alloys—A company representative discusses the basic principles and the variables in selection and application of resistance machines for welding aluminum alloys. The applications are explained through a comparison with mild steel welding techniques. *June, p. 50.*

Spiral-welded tubing offers strength, efficiency and economy—A high-frequency resistance welding unit and an electronic mill have been combined by New Rochelle Tool Corp., New Rochelle, N. Y., to produce spiral-welded tubing at high speeds in diameters ranging from 1½ in. to 10 ft or more. *June, p. 53.*

Consider residual stresses when welding—There has been discussion pro and con whether or not tensions created during welding can be ignored. The author says they cannot be, and explains his reasons why. *June, p. 66.*

SAFETY

A short history of the safety hat—The early beginnings of the safety hat is traced down to the present. The author gives a basis for his advice, "When the job demands, wear a safety hat." *December, p. 52.*

Fire protection and protection in welding and cutting operations—In this article, fire prevention through proper observance of safety standards and correct protection procedures if a fire should start are discussed. Also included are nine rules of safety. *January, p. 57.*

SPECIAL REPORTS

National Welded Products Month—Photos and facts describe the invaluable uses of welding on products that play an important part in everyone's life. Special six-page section is in observance of National Welded Products Month, September, 1958. *September, p. 29.*

A guide to nuclear power—Basic principles of nuclear power are described in the first article of a four-part series. The second installment deals with nuclear reactors. Coupled with this is "Atomic milestone," a description of the welding steps followed in fabricating a stainless steel reactor vessel. Metallurgical problems, including design and construction, encountered in the fabrication of reactors are discussed in the third article. The final portion deals with thermonuclear fusion and the problems involved in producing sufficient energy to make this process both workable and economical. *October, p. 36; January, p. 31; February, p. 34; March, p. 40.*

Ultrasonics: tool of the future—Degreasing, welding, weld inspection and shop decontamination are listed as some of the uses of ultrasonic sound waves as this modern welding process begins taking giant steps in the welding industry. *October, p. 52.*

A message to management—This is an open letter to management which WELDING ENGINEER received from a weldor with 30 years experience. *WE* feel there is a lesson to be learned by all from this man's experience on his most recent job. *November, p. 31.*

Machines for production—In this issue a special section is devoted to welding's many assistants—the production machines which cut, bend, stamp or position parts to be welded, or finish them after welding. *December, p. 35.*

Flames buckled this steel, and flames straightened it—One of the nation's most extensive flame-straightening jobs—on the flame-wracked structure of hangars 1 and 2 at McChord Air Force Base—is treated in detail in the first part of a series. The second installment covers completion of repairs and final cost details. *February, p. 40; March, p. 31.*

Plasma heat: newest in welding's product lineup—How hot is 20,000 F? Here's the answer to this and other questions relating directly to the properties of a new torch operated on plasma (ionized gas) and affording the user a heat range of 3,000 to 30,000 F. *February, p. 50.*

Oil's first century—born in freedom, working for progress—In its first 100 years, the oil industry has advanced from a 69½ ft well to the world's deepest—25,340 ft—in Texas. In this article, the interim is traced. The May issue is devoted to the oil industry's centennial. *May, p. 27.*

A welding and pipelining history—The history of the use of welding on various types of underground pipe is herein traced. *May, p. 33.*

Another firm offers electron-beam welder to industry—High Vacuum Equipment Corp. is latest firm to develop an electron-beam welder. *May, p. 40.*

Will these . . . improve this—In this report, the experiments concerned with improving conventional welds through use of ultrasonics is revealed. Tests with ultrasonic sound waves have showed that potential benefits for resistance welding, brazing, and especially arc welding, exist. *May, p. 48.*

Cable prices and sales on way up, survey shows—In this special report, WELDING ENGINEER relates its findings on cable's future after a survey of leading manufacturers. *June, p. 45.*

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DC GOLD STAR SR

Maximum arc stability is **delivered** for sounder, denser welds — and more of them — in less time, with **all** electrodes in **all** positions. Easiest starting, plus smoothest arc and literally **quiet** operation are assured by Miller's new transformer, new weld stabilized circuit and new completely sealed semimetallic rectifier. Available in single and duplex models of from 200 to 1200 amperes. Horizontal SRH models in 30" height.

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All Miller 100 Series welders meet or surpass NEMA standards, and are designed for heavy production and automatic fixture welding. Elimination of magnetic arc blow, instant arc striking and unequaled arc stability assure highest efficiency with all ac electrodes and particularly with low hydrogen and stainless steel. Available in models from 200 to 600 amperes, plus three models for submerged arc welding.

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Extends the revolutionary advances introduced by the Gold Star SR into the combination ac-dc welder field. Control kit (optional) makes possible seven welding processes from single cabinet, including ac metallic arc; dc metallic arc; ac inert gas, manual; ac inert gas, automatic; dc inert gas, manual; dc inert gas, automatic; and dc inert gas spot welder. The Gold Star 300 Series stems from four basic models with ac or dc welding range amperages of 2-300, 3-425, 4-550, and 17-750.

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This 100% duty cycle gasoline engine driven welder/power plant is the most copied of Miller's original designs. Power is supplied by renowned Onan two-cylinder, four-cycle, 12.9 hp air-cooled engine. AEA-200-L provides full 225 amperes of welding current, or, 5 KW of 115/230 ac power, or, 1 KW of dc 115v. Tungsten inert gas conversion unit and Bendix drive electric starter offered as optionals. Five other gas drive models in dc or ac-dc to 300 amps at 100% duty cycle.

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CLASSIFIED PRODUCT SECTION

Products listed alphabetically in this section constitute its headings. Under each heading appear names of the manufacturers—also listed alphabetically. When you want to find the name of a manufacturer, turn to the listing of the specific product. Complete street addresses will be found in the Names and Addresses section. A Trade Name index precedes that.

ABRASIVE BELT GRINDERS

American Diamond Saw Co., Portland, Ore.
Acme Mfg. Co., Detroit, Mich.
Balmar, Franklin, Corp., Baltimore, Md.
Behr-Manning Div., Troy, N. Y.
Buckeye Tool Corp., Dayton, Ohio
Divine Brothers Co., Utica, N. Y.
Fox Grinders, Inc., Pittsburgh, Pa.
Hammond Machinery Builders, Inc., Kalamazoo, Mich.
Jones Engineering Co., Ellwood City, Pa.
MacDermid, Inc., Waterbury, Conn.
Nu-Matic Grinders, Inc., Cleveland, Ohio
Peterson Welding Laboratories, Kansas City, Mo.
Porter-Cable Machine Co., Syracuse, N. Y.
Ryman Engineering Co., Inc., Ellwood City, Pa.
Standard Electric Tool Co., The, Cincinnati, Ohio
Thor Power Tool Co., Chicago, Ill.
Van Dorn Electric Tool Co., Towson, Md.

ABRASIVE BELTS

Abrasive Products, Inc., So. Braintree, Mass.
Armour & Co., Alliance, Ohio
Atlas Abrasives Corp., Brooklyn, N. Y.
Behr-Manning Div., Troy, N. Y.
Belmont Abrasives, Boston, Mass.
Carborundum Co., The, Niagara Falls, N. Y.
Clover Mfg. Co., Norwalk, Conn.
DoAll Co., Des Plaines, Ill.
Michigan Abrasive Co., Detroit, Mich.
Midwest Abrasive Co., Owosso, Mich.
Minnesota Mining & Mfg. Co., St. Paul, Minn.
Norton Co., Worcester, Mass.
Ryman Engineering Co., Inc., Ellwood City, Pa.
Tinkote Co., Revere, Mass.
Universal Wheel & Abrasive Corp., Chicago, Ill.
Victor Balata & Textile Belting Co., New York, N. Y.

ABRASIVE BRICKS and STICKS

Bay State Abrasive Products Co., Westboro, Mass.
Behr-Manning Div., Troy, N. Y.
Carborundum Co., The, Niagara Falls, N. Y.
Cincinnati Milling Products Div., Cincinnati, Ohio
Macklin Co., Jackson, Mich.
Mid-West Abrasive Co., Owosso, Mich.
Norton Co., Worcester, Mass.
Sandusky Abrasive Wheel Co., Kalamazoo, Mich.
Simonds Abrasive Co., Philadelphia, Pa.
Sterling Grinding Wheel Div., Cleveland Quarries Co., Tiffin, Ohio
Universal Wheel & Abrasive Corp., Chicago, Ill.
Weldon Roberts Rubber Co., Newark, N. J.

ABRASIVE DISCS

Abrasive Products, Inc., So. Braintree, Mass.
Atlantic Abrasive Corp., S. Braintree, Mass.
Albertson & Co., Inc., Sioux City, Iowa
Armour & Co., Alliance, Ohio
Atlas Abrasive Corp., Brooklyn, N. Y.
Bates Products, Inc., Chicago, Ill.
Bay State Abrasive Products Co., Westboro, Mass.
Behr-Manning Div., Troy, N. Y.
Belmont Abrasives, Boston, Mass.
Besly-Welles Corp., Beloit, Wis.
Chicago Wheel & Mfg. Co., Chicago, Ill.
Clover Mfg. Co., Norwalk, Conn.
Cortland Grinding Wheels Corp., Chester, Mass.
de Sanno, A. P., & Sons, Inc., Phoenixville, Pa.
Haskins, R. G., Co., Chicago, Ill.
Hoffman, R. W., Co., Inc., Chicago, Ill.
Marvel Industries, Inc., Boston, Mass.
Michigan Abrasive Co., Detroit, Mich.
Mid-West Abrasive Co., Owosso, Mich.
Minnesota Mining & Mfg. Co., St. Paul, Minn.
Norton Co., Worcester, Mass.
Precision Grinding Wheel Co., Inc., Philadelphia, Pa.
Raybestos-Manhattan, Inc., Passaic, N. J.
Sandusky Abrasive Wheel Co., Kalamazoo, Mich.
U. S. Rubber Co., New York, N. Y.
Weldon Roberts Rubber Co., Newark, N. J.
Wisconsin Abrasive Co., Milwaukee, Wis.

ABRASIVE GRAINS

Abrasive Products, Inc., So. Braintree, Mass.
Behr-Manning Co., Troy, N. Y.
Carborundum Co., The, Niagara Falls, N. Y.
Macklin Co., Jackson, Mich.
Mid-West Abrasive Co., Owosso, Mich.
Norton Co., Worcester, Mass.
Simonds Abrasive Co., Philadelphia, Pa.

ABRASIVES

Abrasive Products, Inc., So. Braintree, Mass.
Atlantic Abrasive Corp., S. Braintree, Mass.
Albertson & Co., Inc., Sioux City, Iowa
Armour & Co., Alliance, Ohio
Bay State Abrasive Products Co., Westboro, Mass.
Behr-Manning Corp., Troy, N. Y.
Belmont Abrasives, Boston, Mass.
Carborundum Co., The, Niagara Falls, N. Y.
Chicago Wheel Mfg. Co., Chicago, Ill.
Cincinnati Milling Machine Co., Cincinnati, Ohio
Clayton-Sherman Abrasives Co., Detroit, Mich.
Clover Mfg. Co., Norwalk, Conn.
Desanno, A. P., & Son, Inc., Phoenixville, Pa.
Divine Brothers Co., Utica, N. Y.
DoAll Co., Des Plaines, Ill.
duPont, E. I., de Nemours & Co., Inc., Wilmington, Del.
Fibre Abrasive Corp., Chicago, Ill.
Hoffman, Robt. W. Co., Inc., Chicago, Ill.
Ideal Industries, Inc., Sycamore, Ill.
Industrial Overlay Metals, Inc., Eaton, Ohio
Macklin Co., Jackson, Mich.
Michigan Abrasive Co., Detroit, Mich.
Mid-West Abrasive Co., Owosso, Mich.
Minnesota Mining & Mfg. Co., St. Paul, Minn.
Norton Co., Worcester, Mass.
Precision Grinding Wheel Co., Inc., Philadelphia, Pa.
Raybestos-Manhattan, Inc., Passaic, N. J.
Simonds Abrasive Co., Philadelphia, Pa.
Strand, N. A., Div., The Balmar Corp., Chicago, Ill.
Techline Div., Wheelabrator Corp., Vicksburg, Mich.
Thor Power Tool Co., Chicago, Ill.
United States Rubber Co., Fort Wayne, Ind.
Universal Wheel & Abrasive Corp., Chicago, Ill.
Weldon Roberts Rubber Co., Newark, N. J.

A-C ARC WELDERS

(See "Arc Welders, A-C")

A-C/D-C WELDERS

(See "Arc Welders, A-C/D-C")

ACETYLENE

Acetylene Gas Co., St. Louis, Mo.
Acetylene Service Co., Denver, Colo.
Air Products, Inc., Allentown, Pa.
Air Reduction Sales Co., New York, N. Y.
Alabama Oxygen Co., Birmingham, Ala.
Alaska Oxygen Co., Fairbanks, Alaska
Aldon Oxygen Mfg. Co., Inc., Collingdale, Pa.
American Compressed Gas Products, Inc., Ft. Wayne, Ind.
American Gas & Chemical Co., Harrison, N. J.
American Oxygen Service Corp., Harrison, N. J.
Atlas Acetylene Co., Kearney, N. J.
Balbach Co., The, Omaha, Neb.
Big Three Welding Equip. Co., Houston, Texas
Bird Gas Corp., Detroit, Mich.
Buckeye Oxygen Co., Canton, Ohio
Burdett Oxygen Co., The, Cleveland, Ohio
Cia. Productora De Oxigeno, S. A., Monterey, Mexico
Commercial Gas Corp., Wilkes-Barre, Pa.
Commonwealth Prods. Co. de Mexico, S. A., Mexico D. F.
Compania Mexicana AGA, S. A., Mexico 1, D. F.
Compania Mexicana de Soldadura Autogena, S. A., Mexico
Corpus Christi Oxygen Co., Corpus Christi, Texas
Delta Oxygen Co., Memphis, Tenn.
Denver Oxygen Co., Inc., The, Denver, Colo.
Dye Oxygen Co., Inc., Phoenix, Ariz.
Thomas A. Edison, Inc., Stuyvesant Falls, N. Y.
Gases Agamex, S. A., Mexico
Gases Industriales, S. A., San Luis Potosi, S.L.P., Mexico
Gulf Oxygen Co., Inc., Lake Charles, La.
Gaspro, Ltd., Honolulu, T.H.
Houston Oxygen Co., Houston, Tex.
Independent Engineering Co., O'Fallon, Ill.
Indiana Oxygen Co., Indianapolis, Ind.
Industrial Air Products Co., Portland, Ore.
Inland Oxy-Acetylene Co., Inc.
Kansas Oxygen, Inc., Hutchinson, Kan.
Keenan Welding Supplies Co., Albany, Ga.
Linde Co., New York 17, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Maine Industrial Gas Co., Lewiston, Me.
Maine Oxyacetylene Co., Auburn, Me.
Marks Oxygen Co., Augusta, Ga.
McDonald Co., B. F., Los Angeles, Cal.
National Welders Supply Co., Charlotte, N. C.
New England Gas Products, Inc., Charlestown, Mass.
National Cylinder Gas Div., Chicago, Ill.
Oklahoma Oxygen Co., Tulsa, Okla.
Oxigeno de Tampico, S. A., Tampico, Tamps., Mexico
Pacific Acetylene Co., San Diego, Calif.
Pacific Oxygen Co., Oakland, Calif.
Puritan Compressed Gas Corp., Kansas City, Mo.
Sabine Oxygen Co., Port Arthur, Texas
Sierra Oxygen Co., Reno, Nevada
Southern Oxygen Co., Washington, D. C.
Steele Gases, Inc., Forest Park, Ill.
Stewart Oxygen Co., San Francisco, Calif.
Superior Air Products Co., Newark, N. J.
Superior Industrial Gas Corp., Astoria, N. Y.
Superior Oxy-Acetylene Machine Co., Hamilton, Ohio
Tex-Air Gas Co., Inc., Amarillo, Texas
Trinity Oxygen Co., Ft. Worth, Texas
Valley Oxygen Co., Bay City, Mich.
Valley Oxygen Co., Hanford, California
Welders Supply Co., Little Rock, Ark.
Welding Gas Products Co., Chattanooga, Tenn.
Welding & Industrial Prods., Ltd., Honolulu, T.H.
Welding Materials, Inc., Lemoyne, Pa.
West Texas Oxygen Co., Lubbock, Tex.
Western Oxygen, Inc., Seattle, Wash.
Whitmore Oxygen Co., Salt Lake City, Utah
Wolverine Gas Products, Inc., Saginaw, Mich.

ACETYLENE CYLINDERS

Coyne Cylinder Co., San Francisco, Calif.
Independent Engineering Co., O'Fallon, Ill.
Linde Co., New York, N. Y.
Norris-Thermador Corp., Los Angeles, Calif.

ACETYLENE GAGES

(See: "Oxygen & Acetylene Gages")

ACETYLENE GENERATORS

Adler Mfg. Co., Chicago, Ill.
Air Products, Inc., Allentown, Pa.
Air Reduction Sales Co., New York, N. Y.
Eagle Welding Equipment Co., Chicago, Ill.
Independent Engineering Co., O'Fallon, Ill.
Linde Co. New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Miles, John R. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
Sight Feed Generator Co., The, West Alexandria, Ohio
Superior Air Products Co., Newark, N. J.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Welderz-Frend Generator Co., Lubbock, Texas

ACETYLENE REGULATOR ADAPTERS

Acetogen Gas Co., Detroit, Mich.
Air Reduction Sales Co., New York, N. Y.
Bastian-Blessing Co., The, Chicago, Ill.
Burdett Oxygen Co., The, Cleveland, Ohio
Craftsweld Equipment Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
Goss Gas, Inc., Glenshaw, Pa.
Harris Calorific Co., The, Cleveland, Ohio
Hoke, Inc., Cresskill, N. J.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metro Manufacturing Co., Long Island City, N. Y.
Milburn, Alexander, Inc., Baltimore, Md.
Miles, John R. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
Nageldinger, J., & Son, Inc., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
National Welding Equip. Co., San Francisco, Calif.
Oxo Welding Equipment Co., New Lenox, Ill.
Smith Welding Equip. Corp., Minneapolis, Minn.
S-S Co., Brooklyn, N. Y.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Superior Valve & Fittings Co., Pittsburgh, Pa.
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.

AIR COMPRESSORS

Bellows Co., The, Akron, Ohio
Binks Mfg. Co., Chicago, Ill.
Brunner Mfg. Co., Utica, N. Y.
Chicago Pneumatic Tool Co., New York, N. Y.
Curtis Pneumatic Machinery Div., Curtis Mfg. Co., St. Louis, Mo.
DeVilbiss Co., The, Toledo, Ohio
Fairbanks, Morse & Co., Chicago, Ill.
Galland-Denver Co., Quincy, Ill.
Independent Pneumatic Tool Co., Chicago, Ill.
Ingersoll-Rand Co., New York, N. Y.
Joy Mfg. Co., Pittsburgh, Pa.
Kellogg Div., American Brake Shoe Co., Rochester, N. Y.
Paasche Airbrush Co., Chicago, Ill.
Roots-Connersville Blower Corp., Connersville, Ind.
Schramm, Inc., West Chester, Pa.
Smith, Gordon, & Co., Inc., Bowling Green, Ky.
Superior Pneumatic & Mfg., Inc., Cleveland, Ohio
Worthington Corp., Harrison, N. J.

AIR CYLINDERS

Aronson Machine Co., Arcade, N. Y.
Bellows Co., The, Akron, Ohio
Curtis Mfg. Co., St. Louis, Mo.
Galland-Henning Mfg. Co., Milwaukee, Wis.
Lapeer Mfg. Co., Detroit, Mich.
Lindberg Engineering Co., Chicago, Ill.
Miller Fluid Power Co., Melrose Park, Ill.
Production Devices Inc., Whitehall, N. Y.
Studebaker Machine Co., Maywood, Ill.
Taylor-Wharton Iron & Steel Co., Cincinnati, Ohio
Taylor-Winfield, Corp., Warren, Ohio
Vam Products Co., Erie, Pa.

AIR FILTER

(See: "Welder Filters")

AIR PRESSURE REGULATORS

American Oxygen Service Corp., Harrison, N. J.
American Schaeffer & Budenburg Instrument Div., Manning, Maxwell & Moore, Inc., Bridgeport, Conn.
Aro Equipment Corp., The, Bryan, Ohio
Atlas Valve Co., Newark, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Binks Manufacturing Co., Chicago, Ill.
Bristol Co., The, Waterbury, Conn.
Cash, A. W., Valve Mfg. Corp., Decatur, Ill.
Craftsweld Equip. Corp., Long Island City, N. Y.
Davis Regulator Co., Chicago, Ill.
DeVilbiss Co., The, Toledo, Ohio
Dockson Corp., Detroit, Mich.
Farris Engineering Co., Palisades Park N. J.
Generant Engineering Co., Newark 3, N. J.
Hammon Precision Equipment Co., Oakland, Calif.
Hannifin Corp., Chicago, Ill.
Harris Calorific Co., The, Cleveland, Ohio
Hoke, Inc., Cresskill, N. J.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
M-B Products, Detroit, Mich.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Milburn, Alexander, Inc., Baltimore, Md.
Modern Engineering Co., St. Louis, Mo.
Mueller Co., Decatur, Ill.
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National Welding Equip. Co., San Francisco, Calif.
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Oxo Welding Equipment Co., New Lenox, Ill.
Paasche Airbrush Co., Chicago, Ill.
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Schrader's A., Son, Division of Scovill Mfg. Co., Inc., Brooklyn, N. Y.
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S S Co., Brooklyn, N. Y.
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Taylor Instrument Companies, Rochester, N. Y.
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Worthington Pump & Machinery Corp., Harrison, N. J.

AIRLINE FITTINGS

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Chicago Pneumatic Tool Co., New York, N. Y.
DeVilbiss Co., The, Toledo, Ohio
Dixon Valve & Coupling Co., Philadelphia, Pa.
Hose Accessories Co., Philadelphia, Pa.
Hunt, C. B., & Son, Salem, Ohio
Knox Mfg. Co., Philadelphia, Pa.
Lincoln Engineering Co., St. Louis, Mo.
Lunkenheimer Co., The, Cincinnati, Ohio
Mulconroy Co., Philadelphia, Pa.
National Welding Equip. Co., San Francisco, Calif.
Paasche Airbrush Co., Chicago, Ill.
Rotor Tool Co., Cleveland, Ohio
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Shuman, H. B., Mfg. Co., Battle Creek, Mich.
Stewart-Warner Corp., Alemite Div., Chicago, Ill.
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Bellows Co., The, Akron, Ohio
Gardner-Denver Co., Quincy, Ill.
Generant Engineering Co., Newark 3, N. J.
Hannifin Corp., Chicago, Ill.
Independent Pneumatic Tool Co., Chicago, Ill.
Ingersoll-Rand Co., New York, N. Y.
Lincoln Engineering Co., St. Louis, Mo.
M-B Products Co., Detroit, Mich.
Norgren Co., C. A., Denver, Colo.
Paasche Airbrush Co., Chicago, Ill.
Schrader's, A. Son, Div. of Scovill Mfg. Co., Inc., Brooklyn, N. Y.
Superior Pneumatic & Mfg., Inc., Cleveland, Ohio
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ALLOYS, BRAZING

(See: "Brazing Alloys")

ALLOYS, Hardfacing

(See "Hardfacing Electrodes" or "Hardfacing Welding Rods")

ALLOYS, Silver Brazing

(See: "Brazing Alloys")

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Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
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Federated Metals Div., Amer. Smelting & Refining Co., N. Y., N. Y.
Johnson Mfg. Co., Inc., Mount Vernon, Iowa
Kaiser Aluminum & Chemical Sales Co., Oakland, Calif.
Kester Solder Co., Chicago, Ill. (Solder)
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Revere Copper & Brass, Inc., New York, N. Y.
Reynolds Metals Co., Louisville, Ky.
Sightmaster Corp., New Rochelle, New York
Swiss Laboratory, Cleveland, Ohio

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Revere Copper & Brass, Inc., New York, N. Y.
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Bridgeport Brass Co., Bridgeport, Conn.
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Bridgeport Brass Co., Bridgeport, Conn.
Central Steel and Wire Co., Chicago, Ill.
Colonial Alloys Co., Philadelphia, Pa.
Kaiser Aluminum & Chemical Sales, Oakland, Calif.
Revere Copper & Brass, Inc., New York, N. Y.
Reynolds Metals Co., Louisville, Ky.
Whitelight Wire & Supply, Brooklyn, N. Y.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.

ALUMINUM ELECTRODES

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Aluminum Co. of America, Pittsburgh, Pa.
Aluminum Wire Prods. Co., Inc., Glastonbury, Conn.
American Brazing Alloys Co., Pelham, N. Y.
American Welding Alloys Corp., Brooklyn, N. Y.
Arcos Corp., Philadelphia, Pa.
Champion Rivet Co., Cleveland, Ohio
Dalweld Co., Inc., Mount Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Lincoln Electric Co., The, Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metal & Thermit Corp., Rahway, N. J.
Morgan Aluminum Welding Rod Co., Mt. Carmel, Pa.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
Pacific Welding Alloys Mfg. Co., Los Angeles,
Southwire Co., Carrollton, Ga.
Weldaloy Products Co., Detroit, Mich.
Welding Alloys Mfg. Co., Newark, N. J.
Wooldridge Aluminum Welding Prod., Inc., Malden, Mass.

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Air Reduction Sales Co., New York, N. Y.
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Dolweld Co., Inc., Mt. Vernon, N. Y.
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Johnson Mfg. Co., Inc., Mount Vernon, Iowa
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Krembs & Co., Chicago, Ill.
Lake Chemical Co., Chicago, Ill.
Marquette Mfg. Co., Minneapolis, Minn.
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Metalloy Prod. Co., Los Angeles, Calif.
Morey Flux & Chem. Co., Wilmington, Del.
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National Cylinder Gas Div., Chicago, Ill.
Northeast Metals Co., Philadelphia, Pa.
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Sierra Welding Flux Co., Temple City, Calif.
Sight Feed Generator Co., West Alexandria, Ohio
Special Chemical Corp., Ossining, N. Y.
Superior Flux & Mfg. Co., Cleveland, Ohio
Taylor-Winfield Corp., The, Warren, Ohio
Tweco Products, Inc., Wichita, Kan.
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Whitelight Wire & Supply, Brooklyn, N. Y.

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American Brazing Alloys Co., Pelham, N. Y.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farralloy Co., Philadelphia, Pa.
Galv-Weld Products, Dayton, Ohio
Johnson Mfg. Co., Inc., Mt. Vernon, Iowa
Kapp Alloy & Wire Co., Franklin, Pa.
Kester Solder Co., Chicago, Ill.
Metal Bond Mfg. Co., St. Louis, Mo.
Metalloy Prod. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Reynolds Metals Co., Louisville, Ky.
Tweco Products, Inc., Wichita, Kan.
Welding Alloys Mfg. Co., Newark, N. J.
Whitelight Wire & Supply, Brooklyn, N. Y.
White Metal Rolling & Stamping Corp., Brooklyn, N. Y.

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Bridgeport Brass Co., Bridgeport, Conn.
Colonial Alloys Co., Philadelphia, Pa.
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Revere Copper & Brass, Inc., New York, N. Y.
Reynolds Metals Co., Louisville, Ky.
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Whitelight Wire & Supply, Brooklyn, N. Y.

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Aluminum Co. of America, Pittsburgh, Pa.
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Eutectic Welding Alloys Corp., Flushing, N. Y.
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Imperial Brass Mfg. Co., Chicago, Ill.
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Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metal & Thermit Corp., Rahway, N. J.
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Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
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Southwire Co., Carrollton, Ga.
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Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
United Welding Service Co., Franklin, Pa.
United Wire & Supply Corp., Providence, R. I.
Welding Alloys Mfg. Co., Newark, N. J.
Weldit, Inc., Detroit, Mich.
Whitelight Wire & Supply, Brooklyn, N. Y.

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Aladdin Rod & Flux Mfg. Co., Grand Rapids, Mich.
Aluminum Co. of America, Pittsburgh, Pa.
Aluminum Wire Prods. Co., Inc., Glastonbury, Conn.
American Brazing Alloys Co., Pelham, N. Y.
Anaconda Wire & Cable Co., New York, N. Y.
Arcos Corp., Philadelphia, Pa.
Champion Rivet Co., Cleveland, Ohio
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Drawalloy Corp, York, Pa.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Kaiser Aluminum & Chemical Corp., Oakland, Calif.
Linde Co., New York, N. Y.
McKay Co., The, Pittsburgh, Pa.
Metal & Thermit Corp., Rahway, N. J.
Morgan Aluminum-Welding Rod Co., Mt. Carmel, Pa.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Reid-Avery Co., Baltimore, Md.
Reynolds Metals Co., Louisville, Ky.
Southwire Co., Carrollton, Ga.
United Wire & Supply Corp., Providence, R. I.
Welding Alloys Mfg. Co., Newark, N. J.

ALUMINUM-BRONZE ELECTRODES

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American Brass Co., Waterbury, Conn.
American Brazing Alloys Co., Pelham, N. Y.
Ampco Metal, Inc., Milwaukee, Wis.
Burdett Oxygen Co., The, Cleveland, Ohio
Commerce Pattern Foundry & Mach. Co., Detroit, Mich.
Dolweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Metal & Thermit Corp., Rahway, N. J.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.

ALUMINUM-BRONZE WELDING RODS

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(See: "Wedge Bars")

TRADE NAME SECTION BEGINS ON PAGE 82

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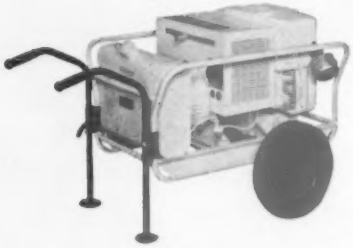

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Electric Arc Inc., Newark, N. J.
Emerson Electric Mfg. Co., The, St. Louis, Mo.
Forney Mfg. Co., Fort Collins, Colo.
Harnischfeger Corp., Milwaukee, Wis.
Hobart Bros. Co., Troy, Ohio
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Lincoln Electric Co., The, Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metal & Thermit Corp., Rahway, N. J.
Mid-States Welder Mfg. Co., Chicago, Ill.
Miller Electric Mfg. Co., Inc., Appleton, Wis.
Mor-Amp Inc., Jackson, Mo.
National Cylinder Gas Div., Chicago, Ill.
Precision Welder Mfg. Co., Chicago, Ill.
Shober, Inc., Stockton, Calif.
Smith Corp., A. O., Milwaukee, Wis.
Trindl Products, Ltd., Chicago, Ill.
Twentieth Century Mfg. Co., Minneapolis, Minn.
Welding Apparatus Co., Chicago, Ill.
Weltronic Co., Detroit, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.
Will Weld Mfg. Co., Inc., Omaha, Neb.

ARC WELDERS, A-C/D-C

Air Reduction Sales Co., New York, N. Y.
Birdsell Mfg. Co., Palo Alto, Calif.
Emerson Electric Mfg. Co., The, St. Louis, Mo.
Federal Tool Engineering Co., Cedar Grove, N. J.
Harnischfeger Corp., Milwaukee, Wis.
Hobart Bros. Co., Troy, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Metal & Thermit Corp., Rahway, N. J.
Mid-States Welder Mfg. Co., Chicago, Ill.
Miller Electric Mfg. Co., Inc., Appleton, Wis.
National Cylinder Gas Div., Chicago, Ill.
Smith Corp., A. O., Milwaukee, Wis.
Welduction Corp., Oak Park, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.

ARC WELDERS, Automatic

(See: "Automatic Welding Equipment")

ARC WELDERS, C-P

Air Reduction Sales Co., New York, N. Y.
Harnischfeger Corp., Milwaukee, Wis.
Hobart Bros. Co., Troy, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Metal & Thermit Corp., Rahway, N. J.
Miller Electric Mfg. Co., Inc., Appleton, Wis.
National Cylinder Gas Div., Chicago, Ill.
Smith, A. O., Corp., Milwaukee, Wis.
Vickers Electric Div., St. Louis, Mo.
Welduction Corp., Oak Park, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.

ARC WELDERS, D-C

Air Reduction Sales Co., New York, N. Y.
Electric Arc, Inc., Newark, N. J.
Emerson Electric Co., St. Louis, Mo.
Harnischfeger Corp., Milwaukee, Wis.
Hobart Bros. Co., Troy, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Metal & Thermit Corp., Rahway, N. J.
Miller Electric Mfg. Co., Inc., Appleton, Wis.
National Cylinder Gas Div., Chicago, Ill.
Smith Corp., A. O., Milwaukee, Wis.
Westinghouse Electric Corp., Buffalo, N. Y.

ARC WELDERS, Inert-Gas Shielded

(See: "Tig and Mig Equipment")

ARC WELDERS, Rectifier

Air Reduction Sales Co., New York, N. Y.
Harnischfeger Corp., Milwaukee, Wis.
Hobart Bros. Co., Troy, Ohio
KSM Products, Inc., Merchantville, N. J.
Lincoln Electric Co., The, Cleveland, Ohio
Metal & Thermit Corp., Rahway, N. J.
Mid-States Welder Mfg. Co., Chicago, Ill.
Miller Electric Mfg. Co., Inc., Appleton, Wis.
National Cylinder Gas Div., Chicago, Ill.
Smith, A. O., Corp., Milwaukee, Wis.
Vicker Electric Div., St. Louis, Mo.
Westinghouse Electric Corp., Buffalo, N. Y.

ARC WELDERS, Semiautomatic

Air Reduction Sales Co., New York, N. Y.
Alloy Rods Co., York, Pa.
American Manganese Steel Div., Chicago Heights, Ill.
Auto Arc-Weld Mfg. Co., Cleveland, Ohio
Hobart Brothers Co., Troy, Ohio
Lincoln Electric Co., Cleveland, Ohio
Linde Co., New York, N. Y.
Wall Colmonoy Corp., Detroit, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.

ARC WELDING ELECTRODES

(See aluminum, cast-iron, mild-steel, etc., electrode categories)

ARC WELDING VOLTAGE REGULATORS

(See: "Voltage Regulators, Arc")

ARC-AIR CUTTING & GOUGING APPARATUS

Arcair Co., Lancaster, Ohio

ARC-OXYGEN CUTTING APPARATUS

Arcos Corp., Philadelphia, Pa.
Craftsweld Equip. Corp., Long Island City, N. Y.
Hobart Bros., Troy, Ohio

ARC-CUTTING ELECTRODES

(See "Cutting Electrodes")

ARGON

Air Reduction Sales Co., New York, N. Y.
American Gas & Chemical Corp., Harrison, N. J.
American Oxygen Service Corp., Harrison, N. J.
Big Three Welding Equipment Co., Houston, Texas
Buckeye Oxygen Co., Canton, Ohio
Burdett Oxygen Co., The, Cleveland, Ohio
Commercial Gas Corp., Wilkes-Barre, Pa.
Houston Oxygen Co., Houston, Texas
Independent Engineering Co., Inc., O'Fallon, Ill.
Industrial Air Products Co., Portland, Ore.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
National Cylinder Gas Div., Chicago, Ill.
New England Gas Products, Inc., Charlestown, Mass.
Southern Oxygen Co., Washington, D. C.
Steele Gases, Inc., Forest Park, Ill.
Superior Industrial Gas Corp., Astoria, N. Y.
Valley Oxygen Co., Bay City, Mich.
Wolverine Gas Products, Inc., Saginaw, Mich.

ASBESTOS, Sheets and Paste

Carey, Philip, Mfg. Co., Cincinnati, Ohio
Greene, Tweed & Co., North Wales, Pa.
Janos Asbestos Co., New York, N. Y.
Johns-Manville Corp., New York, N. Y.
Keasbey & Mattison Co., Ambler, Pa.
Raybestos-Manhattan, Inc., Passaic, N. J.

ATOMIC-HYDROGEN TORCHES

Acme Welding Supply Co., Houston, Texas
Electric Arc, Inc., Newark, N. J.

ATOMIC-HYDROGEN WELDERS

Electric Arc, Inc., Newark, N. J.
Miller Elec. Mfg. Co., Inc., Appleton, Wis.
Universal Electric Sales Corp., Cleveland, Ohio

AUTOMATIC WELDING EQUIPMENT

(See also various arc welder categories)

Acro Welder Mfg. Co., Milwaukee, Wis.
Agnew Electric Co., Milford, Mich.
Air Reduction Sales Co., New York, N. Y.
Airline Welding & Engineering, Hawthorne, Calif.
Allied Welder Corp., Dearborn, Mich.
American Manganese Steel Co., Chicago Heights, Ill.
Auto Arc-Weld Mfg. Co., The, Cleveland, Ohio
Automation Machines & Equipment Co., Inc., Milwaukee, Wis.
Bernard Welding Equip. Co., Chicago, Ill.
Cayuga Machine & Fabr. Co., Inc., Depew, N. Y.
Delta Welder Corp., Detroit, Mich.
Expert Welding Machine Co., Div. Expert Die & Tool Co., Inc., Detroit, Mich.
Goodrich Welding Equip. Corp., Hudsonville, Mich.
C. B. Herrick Mfg. Corp., Cleveland, Ohio
Hobart Bros. Co., Troy, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Linde Co., New York, N. Y.
Mid-States Welder Mfg. Co., Chicago, Ill.
Miller Elec. Mfg. Co., Inc., Appleton, Wis.
Morton Mfg. Co., Muskegon Heights, Mich.
National Cylinder Gas Div., Chicago, Ill.
Peck, Cecil C., Co., Cleveland, Ohio
Reid-Avery Co., Baltimore, Md.
Resistance Welder Corp., Bay City, Mich.
Sight Feed Generator Co., West Alexandria, Ohio
Smith, A. O., Corp., Milwaukee, Wis.
Taylor-Winfield Corp., The, Warren, Ohio
Webb Corp., Webb City, Mo.
Weltronic Co., Detroit, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.
World Electric Co., Cleveland, Ohio

AUTOMATIC HARDFACING WIRE

(See "Hardfacing Wire")

AUTOMATIC TIMERS

(See: "Resistance Welding Timers")

AUTOMATIC WELDING HEADS, Carbon Dioxide

Air Reduction Sales Co., New York, N. Y.
Auto Arc-Weld Mfg. Co., Cleveland, Ohio
Bernard Welding Equipment Co., Chicago, Ill.
Goodrich Welding Equipment Corp., Hudsonville, Mich.
Hobart Bros. Co., Troy, Ohio
Linde Co., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
Reid-Avery Co., Baltimore, Md.
Smith, A. O., Corp., Milwaukee, Wis.
Westinghouse Electric Corp., Buffalo, N. Y.

AUTOMATIC WELDING HEADS Inert Gas

Air Reduction Sales Co., New York, N. Y.
Automation Machines & Equipment Co., Inc. Milwaukee, Wis.
Hobart Bros. Co., Troy, Ohio
Linde Co., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
Reid-Avery Co., Baltimore, Md.
Westinghouse Electric Corp., Buffalo, N. Y.

AUTOMATIC WELDING HEADS, Metal Arc

Air Reduction Sales Co., New York, N. Y.
Auto Arc Weld Mfg. Co., Cleveland, Ohio
Bernard Welding Equipment Co., Chicago, Ill.
Hobart Bros. Co., Troy, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
National Cylinder Gas Div., Chicago, Ill.
Peck, Cecil C., Co., Cleveland, Ohio
Reid-Avery Co., Baltimore, Md.
Westinghouse Electric Corp., Buffalo, N. Y.

AUTOMATIC WELDING HEADS, Submerged Arc

American Manganese Steel Co., Chicago Heights, Ill.
Auto Arc Weld Mfg. Co., Cleveland, Ohio
Hobart Bros. Co., Troy, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Linde Co., New York, N. Y.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Cecil C., Co., Cleveland, Ohio
Reid-Avery Co., Baltimore, Md.
Westinghouse Electric Corp., Buffalo, N. Y.

AUTOMATIC WELDING WIRE

Air Reduction Sales Co., New York, N. Y.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Manganese Steel Div., Chicago Heights, Ill.
Ampco Metal, Inc., Milwaukee, Wis.
Arcos Corp., Philadelphia, Pa.
Champion Rivet Co., Cleveland, Ohio
Collins-Edmonds, Inc., Philadelphia, Pa.
Crucible Steel Co. of America, Pittsburgh, Pa.
Drawalloy Corp., York, Pa.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Haynes Stellite Co., Kokomo, Ind.
Hobart Bros. Co., Troy, Ohio
Industrial Overlay Metals Inc., Eaton, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Linde Co., New York, N. Y.
McKay Co., The, Pittsburgh, Pa.
Metal & Thermit Corp., Rahway, N. J.
National Cylinder Gas Div., Chicago, Ill.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Page Steel & Wire Div., Amer. Chain & Cable Co., Monessen, Pa.
Reid-Avery Co., Baltimore, Md.
Sight Feed Generator Co., West Alexandria, Ohio
Smith, A. O., Corp., Milwaukee, Wis.
Southwire Co., Carrollton, Ga.
Standard Steel & Wire Co., Bolivar, Pa.
Stoody Co., Whittier, Calif.
Westinghouse Electric Corp., Buffalo, N. Y.

BABBITT METAL

Alpha Metals, Inc., Brooklyn, N. Y.
American Smelting & Ref. Co., Federated Metals Div., New York, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Bond, Charles Co., Philadelphia, Pa.
Bunting Brass & Bronze Co., The, Toledo, Ohio
Division Lead Co., Summit, Ill.
Eagle-Picher Co., The, Cincinnati Ohio
Gardiner Metal Co., Chicago, Ill.
Johnson Bronze Co., New Castle, Pa.
McCauley Alloy Co., Chicago Heights, Ill.
Magnolia Metal Co., Elizabeth, N. J.
National Lead Co., New York, N. Y.
Randall Graphite Bearings, Inc., Lima, Ohio
Revere Copper & Brass, Inc., New York, N. Y.
Ryerson, Joseph T., & Son, Inc., Chicago, Ill.
Shook Bronze Corp., Lima, Ohio

BACKING RINGS

Arcos Corp., Philadelphia, Pa.
Cayuga Machine & Engrg. Co., Inc., Depew, N. Y.
Commerce Pattern Foundry & Machine Co., Detroit, Mich.
Duramic Products, Inc., New York, N. Y.

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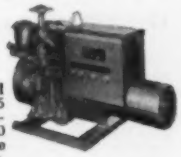

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Grinnell Co., Inc., Providence, R. I.
Mansol Ceramics, Belleville, N. J.
Midwest Piping & Supply Co., Inc., St. Louis, Mo.
Nyala Corp., Philadelphia, Pa.
Oxo Welding Equip. Co., Chicago, Ill.
Riverside Machinery Co., Chicago, Ill.
Robvon Backing Ring Co., Elizabeth, N. J.
Wedge Protectors, Inc., Cleveland, Ohio

BAND SAW MACHINES

Atlas Press Co., Kalamazoo, Mich.
Wells Mfg. Corp., Three Rivers, Mich.

BAR and WIRE SOLDER

Air Reduction Sales Co., New York, N. Y.
Allen L. B., Co., Inc., Chicago, Ill.
Alloy Ring Service, Inc., Indianapolis, Ind.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Alpha Metals, Inc., Brooklyn, N. Y.
American Smelting & Refining Co., Fed. Metals Div., New York, N. Y.
American Welding Alloys, Inc., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Division Lead Co., Summit, Ill.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Fusion Engineering Co., Cleveland, Ohio
Galv-Weld Products, Dayton, Ohio
Gardiner Metal Co., Chicago, Ill.
Handy & Harman, New York, N. Y.
Johnson Mfg. Co., Inc., Mt. Vernon, Iowa
Kester Solder Co., Chicago, Ill.
Kirk, Morris P. & Son, Inc., Los Angeles, Calif.
Metal Bond Mfg. Co., St. Louis, Mo.
Metalloy Prod. Co., Los Angeles, Calif.
National Bearing Metals Corp., St. Louis, Mo.
National Lead Co., New York, N. Y.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Swiss Laboratory, Cleveland, Ohio
United Wire & Supply Corp., Providence, R. I.

BELTS, Abrasive

(See: "Abrasive Belts")

BENCH WELDERS, Resistance

(Including band-saw welders)

Acro Welder Mfg. Co., Milwaukee, Wis.
Alphil Spot Welder Mfg. Corp., Brooklyn, N. Y.
Banner Welder, Inc., Milwaukee, Wis.
Brennan, Bucci & Weber, Inc., New York, N. Y.
Eisler Engineering Co., Inc., Newark, N. J.
Electron Arc, Inc., Lynn, Mass.
Federal Tool Engineering Co., Cedar Grove, N. J.
Hoffman, Robert W. Co., Inc., Chicago, Ill.
Larkin Welder & Machine Corp., Brooklyn, N. Y.
Metron Instrument Co., Denver, Colo.
Micro Products Co., Chicago, Ill.
Miller Elec. Mfg. Co., Inc., Appleton, Wis.
Peer, Inc., Benton Harbor, Mich.
Precision Welder & Flexopress Corp., Cincinnati, Ohio
Raytheon Mfg. Co., Waltham, Mass.
Rockwell Mfg. Co., Pittsburgh, Pa.
Stryco Mfg. Co., San Francisco, Calif.
Swift Electric Welder Co., Detroit, Mich.
Taylor- Winfield Corp., Warren, Ohio
Thomson Electric Welder Co., Lynn, Mass.
Tweezer Weld, Div. of Federal Tool Engrg., Inc., Newark, N. J.
Unitek Corp., Pasadena, Calif.
Universal Electric Sales Corp., Cleveland, Ohio
Vangtronic Corp., The, Bridgeport, Conn.

BENDERS—Conduit, Pipe and Tubing

(See also: "Pipe Bending Machines")

American Pipe Tool Co., Chicago, Ill.
Belmont Abrasives, Boston, Mass.
Blackhawk Mfg. Co., Milwaukee, Wis.
Durbin-Durco, St. Louis, Mo.
Duro Metal Products Co., Chicago, Ill.
Greenlee Tool Co. (Division of Greenlee Bros. & Co.), Rockford, Ill.
Hossfeld Mfg. Co., Winona, Minn.
Imperial Brass Mfg. Co., The, Chicago, Ill.
National Electric Prods. Co., Pittsburgh, Pa.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Pandjiris Weldment Co., St. Louis, Mo.
Parker Appliance Co., Inc., The, Cleveland, Ohio
Pedrick Tool & Machine Co., Philadelphia, Pa.
Plomb Tool Co., Los Angeles, Calif.
Republic Steel Corp., Cleveland, Ohio
Tal Bender, Inc., Milwaukee, Wis.
Taylor-Winfield Corp., Warren, Ohio
Templeton, Kenly & Co., Chicago, Ill.
Toledo Pipe Threading Machine Co., The, Toledo, Ohio
Wallace Supplies Mfg. Co., Chicago, Ill.
Weatherhead Co., The, Cleveland, Ohio

BENDING MACHINES, Pipe

(See: "Benders," "Pipe Bending Machines")

BENDING and STRAIGHTENING MACHINES, for Beam, Rail, Rod or Shaft

Albert & J. M. Anderson Mfg. Co., Boston, Mass.
Baldwin Locomotive Works, The, Philadelphia, Pa.
Blackhawk Mfg. Co., Milwaukee, Wis.
Champion Blower & Forge Co., Lancaster, Pa.
Cleveland Crane & Engineering Co., Wickliffe, Ohio
Dudgeon, Richard, Inc., New York, N. Y.
Hossfeld Mfg. Co., Winona, Minn.
Hydraulic Press Mfg. Co., The, Mount Gilead, Ohio
Kling Bros. Engineering Works, Chicago, Ill.
Medart Co., The, St. Louis, Mo.
Niagara Machine & Tool Works, Buffalo, N. Y.
Pandjiris Weldment Co., St. Louis, Mo.
Studebaker Machine Co., Maywood, Ill.
Taylor-Winfield Corp., Warren, Ohio
Thomas Machine Mfg. Co., Pittsburgh, Pa.
Watson-Stillman Co., The, Roselle, N. J.
Webb Corp., The, Webb City, Mo.

BENDING BLOCKS

Acorn Iron & Supply Co., Phila., Pa.
Hossfeld Mfg. Co., Winona, Minn.
Stahl Equipment Co., Brookline Village, Mass.

BENDING BRAKES

Airtherm Mfg. Co., St. Louis, Mo.
Barth Mfg. Co., The, Milldale, Conn.
Cleveland Crane & Engineering Co., The, Wickliffe, Ohio
Munton Manufacturing Co., Franklin Park, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
O-Neil-Irwin Mfg. Co., Lake City, Minn.
Peck, Stow & Wilcox Co., The, Southington, Conn.
Pyramid Steel Co., Cleveland, Ohio
Service Machine Co., Elizabeth, N. J.
Taylor-Winfield Corp., Warren, Ohio
Verson Allsteel Press Co., Chicago, Ill.

BENDING ROLLS

Belmont Abrasives, Boston, Mass.
Bethlehem Steel Co., Bethlehem, Pa.
Bissett Steel Co., The, Cleveland, Ohio
Buffalo Forge Co., Buffalo, N. Y.
Cayuga Machine & Fabr. Co., Inc., Depew, N. Y.
Hossfeld Mfg. Co., Winona, Minn.
Kling Bros. Engineering Works, Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Peck, Stow & Wilcox Co., The, Southington, Conn.
Pedrick Tool & Machine Co., Philadelphia, Pa.
Service Machine Co., Elizabeth, N. J.
Wallace Supplies Mfg. Co., Chicago, Ill.
Webb Corp., The, Webb City, Mo.

BLACKSMITHS' HAMMERS

American Fork & Hoe Co., Cleveland, Ohio
Champion DeArment Tool Co., Meadville, Pa.
Greene, Tweed & Co., No. Wales, Pa.
Leetonia Tool Co., The, Leetonia, Ohio
Mayhew Steel Products, Inc., Shelburne Falls, Mass.
Plumb, Fayette R., Inc., Philadelphia, Pa.

BLOCKS, Chain

Chester Hoist Co., Lisbon, Ohio
Chisholm-Moore Hoist Corp., Tonawanda, N. Y.
Ford Chain Block Division of American Chain & Cable Co., Inc., Philadelphia, Pa.
Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Division, Muskegon, Mich.
Reading Chain & Block Corp., Reading, Pa.
Robbins & Myers, Inc., Hoist & Crane Division, Springfield, Ohio
Round, David & Son, Cleveland, Ohio
Sosgen Derrick Co., Chicago, Ill.
Wright Mfg. Division of American Chain & Cable Co., Inc., York, Pa.
Yale & Towne Mfg. Co., Philadelphia, Pa.

BLOW PIPES, Brazing

(See: "Brazing Torches")

BLOW TORCHES—Alcohol Gasoline, Kerosene, Gas

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Barnz, Otto, Co., Inc., Rochester, N. Y.
Clayton & Lambert Mfg. Co., Louisville, Ky.

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BRASS, Bars and Sheets

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Bridgeport Brass Co., Bridgeport, Conn.
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Imperial Brass Mfg. Co., Chicago, Ill.
Mueller Brass Co., Port Huron, Mich.
Parker Appliance Co., Inc., The, Cleveland, Ohio
Phelps Dodge Copper Products Corp., New York, N. Y.
Revere Copper & Brass, Inc., New York, N. Y.
Scovill Mfg. Co., Waterbury, Conn.
United Wire & Supply Corp., Providence, R. I.

BRAZE-WELDING FLUXES

Air Reduction Sales Co., New York, N. Y.
Allen L. B. Co., Chicago, Ill.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
American Solder & Flux Co., Philadelphia, Pa.
American Welding Alloys Corp., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Burdett Oxygen Co., Cleveland, Ohio
Columbia Chemical Products Co., Detroit, Mich.
Craftsweld Equip. Corp., Long Island City, N. Y.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
F. R. Faulk Equipment Sales, Pittsburgh, Pa.
Gasflux Co., The, Mansfield, Ohio
General Welding & Equip. Co., Boston, Mass.
Harris Calorific Co., Cleveland, Ohio
K-G Equipment Co., Allentown, Pa.
Klem Chemical Works, Detroit, Mich.
Krembs & Co., Chicago, Ill.
Linde Co., New York, N. Y.
Makepeace, D. E., Co., Attleboro, Mass.
Metal Bond Mfg. Co., St. Louis, Mo.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
National Welding Equip. Co., San Francisco, Calif.
Pal-Weld Mfg. Co., Seattle, Wash.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Peterson Machine Tool, Inc., Merriam, Kan.
Phillips, C. E., & Co., Detroit, Mich.
Special Chemicals Corp., Ossining, N. Y.
Superior Flux & Mfg. Co., Cleveland, Ohio
United Wire & Supply Corp., Providence, R. I.
Victor Equipment Co., San Francisco, Calif.
Welding Alloys Mfg. Co., Newark, N. J.
Weldit, Inc., Detroit, Mich.
York Engineering Co., Chicago, Ill.

BRAZERS, Band Saw Electric

(See: "Resistance-Brazing Machines" and "Bench Welders, Resistance"

BRAZING ALLOYS

Air Reduction Sales Co., New York, N. Y.
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Alloys Specialties Co., Inc., Swissvale, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Aluminum Co. of America, Pittsburgh, Pa.
American Brazing Alloys Co., Pelham, N. Y.
American Platinum & Silver Div., Engelhard Industries, Inc., Newark, N. J.
American Products Corp., Chicago, Ill.
American Silver Co., Flushing, N. Y.
American Welding Alloys Corp., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
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Leach & Garner, R. I.
Makepeace, D. E., Co., Attleboro, Mass.
Mansol Ceramics Co., Belleville, N. J.
McCauley Alloy Sales Co., Chicago, Ill.
Pal-Weld Mfg. Co., Inc., Seattle, Wash.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Sherman & Co., Flushing, N. Y.
Superweld Corp., N. Hollywood, Calif.
United Wire & Supply Corp., Providence, R. I.
Wall Colmonoy Corp., Detroit, Mich.
Western Carbide Corp., N. Hollywood, Calif.
Westinghouse Electric Corp., Buffalo, N. Y.
Whitelight Wire & Supply, Brooklyn, N. Y.

BRAZING ALLOY RINGS

Air Reduction Sales Co., New York, N. Y.
Alloy Ring Service, Inc., Indianapolis, Ind.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Platinum Works, The, Newark, N. J.
American Silver Co., Inc., Flushing, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Co., Flushing, N. Y.
Goldsmith Bros. Smelting & Ref. Co., Chicago, Ill.
Handy & Harman, New York, N. Y.
Lucas-Milhaupt Engineering Co., Cudahy, Wis.
Sherman & Co., Flushing, N. Y.
Special Chemicals Corp., Ossining, N. Y.
Steel Sales Corp., Chicago, Ill.
United Wire & Supply Corp., Providence, R. I.
Westinghouse Electric Corp., Buffalo, N. Y.

BRAZING FLUXES

Air Reduction Sales Co., New York, N. Y.
Aladdin Rod & Flux Mfg. Co., Grand Rapids, Mich.
Allen, L. B., Co., Chicago, Ill.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Alpha Metals, Inc., Jersey City, N. J.
Aluminum Co. of America, Pittsburgh, Pa.
American Brazing Alloys Co., Pelham, N. Y.
American Chemical & Flux Co., Brooklyn, N. Y.
American Platinum & Silver Div., Engelhard Industries, Inc., Newark, N. J.
American Silver Co., Inc., Flushing, N. Y.
American Solder & Flux Co., Philadelphia, Pa.
American Welding Alloys Corp., Brooklyn, N. Y.
Ampco Metal, Inc., Milwaukee, Wis.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Anti-Borax Compound Co., Inc., Ft. Wayne, Ind.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Chase Brass & Copper Co., Waterbury, Conn.
Columbia Chemical Products Co., Detroit 7, Mich.
Craftsweld Equipment Corp., Long Island City, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Gasflux Co., The, Mansfield, Ohio
Goldsmith Bros. Smelting & Ref. Co., Chicago, Ill.
Handy & Harman, New York, N. Y.
International Nickel Co., Inc., The, New York, N. Y.
Johnson Gas Appliance Co., Cedar Rapids, Iowa
Johnson Mfg. Co., Inc., Mount Vernon, Iowa
Krembs & Co., Chicago, Ill.
Lake Chemical Co., Chicago, Ill.
Linde Co., New York, N. Y.
Makepeace, D. E., Co., Attleboro, Mass.
Marquette Mfg. Co., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
Northeast Metals Co., Philadelphia, Pa.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Peterson Machine Tool, Inc., Merriam, Kan.
Sherman & Co., Flushing, N. Y.
Sight Feed Generator Co., The, West Alexandria, Ohio
Smith Welding Equip. Corp., Minneapolis, Minn.
Special Chemical Corp., Ossining, N. Y.
Steel Sales Corp., Chicago, Ill.
Superior Flux & Mfg. Co., Cleveland, Ohio
Superweld Corp., N. Hollywood, Calif.
United Wire & Supply Corp., Providence, R. I.
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.
White, L. B., Co., Onalaska, Wis.
Whitelight Wire & Supply, Brooklyn, N. Y.
York Engineering Co., Chicago, Ill.

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(See also: "Furnaces, Preheating, Annealing, Stress Relieving")

Ajax Electric Co. Inc., Philadelphia, Pa.
Continental Industrial Engineers' Co., Chicago, Ill.
Despatch Oven Co., Minneapolis, Minn.
Eclipse Fuel Engineering Co., Rockford, Ill.
Falcon Equipment Co., New Brighton, Pa.
Gas Appliance Service, Inc., Chicago, Ill.
Hayes, Inc., C. I., Cranston, R. I.
Hevi Duty Electric Co., Milwaukee, Wis.
Holcroft & Co., Detroit, Mich.
Hone, Chas. A., Inc., Baldwin, L. I., N. Y.
Johnson Gas Appliance Co., Cedar Rapids, Iowa
Lepel High Frequency Lab., Inc., New York, N. Y.
Lindberg Engineering Co., Chicago, Ill.
Ohio Crankshaft Co., Cleveland, Ohio
Selas Corp. of America, Philadelphia, Pa.
Surface Combustion Corp., Toledo, Ohio
Thermo Electric Mfg. Co., Dubuque, Iowa
Westinghouse Electric Corp., Buffalo, N. Y.
Young Brothers Co., Cleveland, Ohio

BRAZING MACHINES, Block

New Rochelle Tool Corp., New Rochelle, N. Y.

BRAZING MACHINES, Gas

(See: "Gas-Brazing Machines")

BRAZING OUTFITS, Incandescent Carbon

Acro Welder Mfg. Co., Milwaukee, Wis.
Banner Welder, Inc., Milwaukee, Wis.
Eisler Engineering Co., Inc., Newark, N. J.
Ergolyte Mfg. Co., Philadelphia, Pa.
Ideal Industries, Inc., Sycamore, Ill.
Marquette Mfg. Co., Minneapolis, Minn.
Precision Welder & Flexopress Corp., Cincinnati, Ohio
Progressive Welder Co., Detroit, Mich.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Trindl Products, Ltd., Chicago, Ill.
Weldex, Inc., Detroit, Mich.

BRAZING OUTFITS, Gas

Acetogen Gas Co., Detroit, Mich.
Air Reduction Sales Co., New York, N. Y.
Bastian-Blessing Co., The, Chicago, Ill.
Beaverdell Co., Chicago, Ill.
Dalweld Co., Inc., Mount Vernon, N. Y.
Dockson Corp., Detroit, Mich.
Gasflux Co., Elyria, Ohio
General Scientific Equip. Co., Philadelphia, Pa.
Hammon Precision Equipment Co., Oakland, Calif
Hoke, Incorporated, Englewood, N. J.
Imperial Brass Mfg. Co., The, Chicago, Ill.
Johnson Gas Appliance Co., Cedar Rapids, Ia.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Minneapolis, Minn.
Milburn, Alexander, Inc., Baltimore, Md.
Modern Engineering Co., St. Louis, Mo.
Nageldinger & Son, Inc., J., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
Oxo Welding Equipment Co., New Lenox, Ill.
Purity Cylinder Gases, Inc., Grand Rapids, Mich.
Selas Corp. of America, Philadelphia, Pa.
Sight Feed Generator Co., The, West Alexandria, Ohio
Smith Welding Equip. Corp., Minneapolis, Minn.
S-S Co., Brooklyn, N. Y.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Velocity Power Tool Co., Pittsburgh, Pa.
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.

BRAZING RODS

Air Reduction Sales Co. New York, N. Y.
Allied Weld Craft, Inc., Indianapolis, Ind.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Aluminum Co., of America, Pittsburgh, Pa.
Aluminum Wire Prods. Co., Inc., Glastonbery, Conn.
American Brazing Alloys Co., Pelham, N. Y.
American Chain & Cable Co., Inc., Page Steel & Wire Div., Monessen, Pa.
American Platinum & Silver Div., Engelhard Industries, Inc., Newark, N. J.
American Welding Alloys Corp., Brooklyn, N. Y.
American Wire Products Co., Glastonbury, Conn.
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Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
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Champion Rivet Co. Cleveland, Ohio
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Handy & Harman, New York, N. Y.
Linde Co., New York, N. Y.
Marquette Mfg. Co., Minneapolis, Minn.
Metal & Thermit Corp., Rahway, N. J.
McCauley Alloy Sales Co., Chicago, Ill.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Morgan Aluminum Welding Rod Co., Mt. Carmel, Pa.
Mueller Brass Co., Port Huron, Mich.
National Cylinder Gas Div., Chicago, Ill.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Revere Copper & Brass, Inc., New York , N. Y.
Titan Metal Mfg. Co., Bellefonte, Pa.
United Wire & Supply Corp., Providence, R. I.
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Acetogen Gas Co., Detroit, Mich.
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Dalweld Co., Inc., Mount Vernon, N. Y.
Dockson Corp., Detroit, Mich.
General Welding & Equip. Co., Boston, Mass.
Goss Gas, Inc., Glenshaw, Pa.
Hammon Equipment Co., Oakland, Calif.
Harris Calorific Co., The, Cleveland, Ohio
Imperial Brass Mfg. Co., The, Chicago, Ill.
Johnson Gas Appliance Co., Cedar Rapids, Iowa
Hoke, Inc., Cresskill, N. J.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Milburn, Alexander, Inc., Baltimore, Md.
Modern Engineering Co., St. Louis, Mo.
Nageldinger & Son, Inc., J., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
National Welding Equip. Co., San Francisco, Calif.
Purity Cylinder Gases, Inc., Grand Rapids, Mich.
Selas Corp. of America, Dresher, Pa.
Sight Feed Generator Co., The, West Alexandria, Ohio
Smith Welding Equip. Corp., Minneapolis, Minn.
S-S Co., Brooklyn, N. Y.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Universal Cutting & Welding Equip. Mfg. Co., Ft. Lauderdale, Fla.
Velocity Power Tool Co., Pittsburgh, Pa.
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.
Worcester Taper Pin Co., Worcester, Mass.

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All-State Welding Alloys Co., Inc., White Plains, N. Y.
Dalweld Co., Inc., Mount Vernon, N. Y.
Gasflux Co., The, Elyria, Ohio
Special Chemicals Corp., Ossining, N. Y.

BRONZE, Bars and Sheets, Rolled

American Brass Co., Waterbury, Conn.
American Silver Co., Inc., Flushing, N. Y.
Ampco Metal, Inc., Milwaukee, Wis.
Anaconda Wire & Cable Co., New York, N. Y.
Bissett Steel Co., The, Cleveland, Ohio
Bridgeport Brass Co., Bridgeport, Conn.
Bunting Brass & Bronze Co., Toledo, Ohio
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Johnson Bronze Co., New Castle, Pa.
Mallory, P. R. & Co., Inc., Indianapolis, Ind.
Phelps Dodge Copper Products Corp., New York, N. Y.
Phosphor Bronze Co., The, Seymour, Conn.
Revere Copper & Brass, Inc., New York, N. Y.
Scovill Mfg. Co., Waterbury, Conn.
Seymour Mfg. Co., The, Seymour, Conn.

BRONZE—Casting or Ingots—Aluminum, Manganese and Phosphor

American Smelting & Refining Co., Fed. Metals Div., New York, N. Y.
Ampco Metal, Inc., Milwaukee, Wis.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Phosphor Bronze Co., The, Seymour, Conn.
Turner Brass Works, The, Sycamore, Ill.

BRONZE ELECTRODES

Air Reduction Sales Co., New York, N. Y.
Allied Weld-Craft, Inc., Indianapolis, Ind.
Alloy Rods Co., York, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brass Co., Waterbury, Conn.
American Brazing Alloys Co., Pelham, N. Y.
Ampco Metal, Inc., Milwaukee, Wis.
Bridgeport Brass Co., Bridgeport, Conn.
Central Steel & Wire Co., Chicago, Ill.
Champion Rivet Co., Cleveland, Ohio
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Dalweld Co., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Johnston, A. P., Los Angeles, Calif.
Krembs & Co., Chicago, Ill.
Lincoln Electric Co., The, Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metal & Thermit Corp., Rahway, N. J.
Mueller Brass Co., Port Huron, Mich.
National Cylinder Gas Co., Chicago, Ill.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Phillips, C. E. & Co., Detroit, Mich.
Phosphor Bronze Corp., The, Seymour, Conn.

Revere Copper & Brass, Inc., New York, N. Y.
Seymour Mfg. Co., Seymour, Conn.
Titan Metal Mfg. Co., Bellefonte, Pa.
Welding Equipment & Supply Co., Detroit, Mich.

BRONZE WELDING RODS

Air Reduction Sales Co., New York, N. Y.
Allied Weld-Craft, Inc., Indianapolis, Ind.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brass Co., Waterbury, Conn.
American Brazing Alloys Co., Pelham, N. Y.
American Welding Alloys Corp., Brooklyn, N. Y.
Ampco Metal, Inc., Milwaukee, Wis.
Bridgeport Brass Co., Bridgeport, Conn.
Burdett Oxygen Co., Cleveland, Ohio
Central Steel & Wire Co., Chicago, Ill.
Champion Rivet Co., Cleveland, Ohio
Chase Brass & Copper Co., Waterbury, Conn.
Collins-Edmonds, Inc., Philadelphia, Pa.
Dolweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Gases Agamex, S. A. Mexico
Johnston, A. P., Los Angeles, Calif.
Linde Co., New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metal & Thermit Corp., Rahway, N. J.
Morgan Aluminum Welding Rod Co., Cleveland, Ohio
National Cylinder Gas Div., Chicago, Ill.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Phosphor Bronze Corp., The, Seymour, Conn.
Revere Copper & Brass Inc., New York, N. Y.
Scovill Mfg. Co., Waterbury, Conn.
Seymour Mfg. Co., The, Seymour, Conn.
Sight Feed Generator Co., W. Alexandria, Ohio
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Titan Metal Mfg. Co., Bellefonte, Pa.
Weldit, Inc., Detroit, Mich.

BRUSHES, (Motor, Generator)

Becker Bros. Carbon Co., Cicero, Ill.
Joseph Dixon Crucible Co., Jersey City, N. J.
General Carbon Co., Naperville, Ill.
Keystone Carbon Co., Inc., St. Marys, Pa.
National Carbon Co., New York, N. Y.
Ohio Carbon Co., The, Cleveland, Ohio
Superior Carbon Products, Inc., Cleveland, Ohio

BRUSHES, Scratch

(See: "Weld Cleaning Brushes")

BUFFER-GRINDER, Combination

Albertson & Co., Inc., Sioux City, Iowa
Balmar, Franklin, Corp., Baltimore, Md.
Bradford Machine Tool Co., The, Cincinnati, Ohio
Cincinnati Electric Tool Co., The, Cincinnati, Ohio
Divine Brothers Co., Utica, N. Y.
Duro Metal Products Co., Chicago, Ill.
Hammond Machinery Builders, Inc., Kalamazoo, Mich.
Haskins, R. G., Co., Chicago, Ill.
Hisey-Wolf Machine Co., The, Cincinnati, Ohio
The Nedco Co., Waltham, Mass.
Skil Corp., Chicago, Ill.
Standard Electric Tool Co., The, Cincinnati, Ohio
Stanley Electric Tools, New Britain, Conn.

BUFFING MACHINES, Electric, Portable

Albertson & Co., Inc., Sioux City, Iowa
Black & Decker Mfg. Co., The, Towson, Md.
Bradford Machine Tool Co., The, Cincinnati, Ohio
Buckeye Tools Corp., Dayton, Ohio
Chicago Pneumatic Tool Co., New York, N. Y.
Cincinnati Electrical Tool Co., The, Cincinnati, Ohio
Clark, James, Jr., Electric Co., Louisville, Ky.
Hammond Machinery Builders, Inc., Kalamazoo, Mich.
Independent Pneumatic Tool Co., Chicago, Ill.
Millers Falls Co., Greenfield, Mass.
The Nedco Co., Waltham, Mass.
Rotor Tool Co., Cleveland, Ohio
Skil Corp., Chicago, Ill.
Sterling Tool Products Co., Chicago, Ill.
Stow Manufacturing Co., Inc., Binghamton, N. Y.
Swartz & White Mfg. Co., Binghamton Flexible Shaft Division, Binghamton, N. Y.
Syntron Co., Homer City, Pa.
Thor Power Tool Co., Chicago, Ill.
United States Electrical Tool Co., The, Cincinnati, Ohio
Valley Electric Corp., St. Louis, Mo.
Walker-Turner Co., Plainfield, N. J.
Wodack Electric Tool Corp., Chicago, Ill.

BUFFING MACHINES, Flexible Shaft

Albertson & Co., Inc., Sioux City, Iowa
Balmar, Franklin, Corp., Baltimore, Md.
Bradford Machine Tool Co., The, Cincinnati, Ohio
Haskins, R. G., Co., Chicago, Ill.
Porter-Cable Mach. Co., Syracuse, N. Y.
Pratt & Whitney, Div., Niles-Bement-Pond Co., West Hartford, Conn.
Stow Mfg. Co., Binghamton, N. Y.
Strand, N. A., Div., The Balmar Corp., Chicago, Ill.
Swartz & White Mfg. Co., Binghamton Flexible Shaft Division, Binghamton, N. Y.
United States Electrical Tool Co., The, Cincinnati, Ohio
Wyzenbeek and Staff, Inc., Chicago, Ill.

BUFFING MACHINES, Pneumatic

Aro Equipment Corp., The, Bryan, Ohio
Buckeye Tools Corp., Dayton, Ohio
Chicago Pneumatic Tool Co., New York, N. Y.
Cleco Div., Reed Roll Bit Co., Houston, Texas
Divine Brothers Co., Utica, N. Y.
Gardner-Denver Co., Quincy, Ill.
Independent Pneumatic Tool Co., Chicago, Ill.
Master Pneumatic Tool Co., Inc., Orwell, Ohio
Paasche Airbrush Co., Chicago, Ill.
Rotor Tool Co., Cleveland, Ohio
Schramm, Inc., Westchester, Pa.
Thor Power Tool Co., Chicago, Ill.

BUFFING and POLISHING COMPOUNDS

Allen, L. B. Co., Inc., Chicago, Ill.
Cantol Wax Co., Bloomington, Ind.
Carborundum Co., Inc., The, Niagara Falls, N. Y.
Divine Brothers Co., Utica, N. Y.
Nu Steel Co., Chicago, Ill.
Oakite Products, Inc., New York, N. Y.
Sonneborn, L., Sons, Inc., New York, N. Y.
Techline Div., Wheelabrator Corp., Vicksburg, Mich.
Weldon Roberts Rubber Co., Newark, N. J.

BUFFING and POLISHING STATIONARY MACHINES

Acme Mfg. Co. Detroit, Mich.
Baldor Electric Co., St. Louis, Mo.
Black & Decker Mfg. Co., Towson, Md.
Bradford Machine Tool Co., The, Cincinnati, Ohio
Champion Blower & Forge Co., Lancaster, Pa.
Cincinnati Electrical Tool Co., The, Cincinnati, Ohio
Clark, James, Jr., Electric Co., Louisville, Ky.
Cutter Machine Co., St. Louis, Mo.
Divine Brothers Co., Utica, N. Y.
Duro Metal Products Co., Chicago, Ill.
Hammond Machinery Builders, Inc., Kalamazoo, Mich.
Hisey-Wolf Machine Co., The, Cincinnati, Ohio
Independent Pneumatic Tool Co., Chicago, Ill.
Milwaukee Electric Tool Corp., Milwaukee, Wis.
Robbins & Myers, Inc., Hoist & Crane Division, Springfield, Ohio
Standard Electrical Tool Co., The, Cincinnati, Ohio
Stow Manufacturing Co., Inc., Binghamton, N. Y.
United States Electrical Tool Co., The, Cincinnati, Ohio
Valley Electric Corp., St. Louis, Mo.
Walker-Turner Co., Inc., Plainfield, N. J.

BURNERS, Annealing and Preheating, Etc.

Clements Mfg. Co., Chicago 38, Ill.
Eclipse Fuel Engineering Co., Rockford, Ill.
Gas Appliance Service, Inc., Chicago, Ill.
Hammon Precision Equipment Co., Oakland, Calif.
Harris Calorific Co., The, Cleveland, Ohio
Hauck Manufacturing Co., Brooklyn, N. Y.
Hones, Charles A., Inc., Baldwin, L. I., N. Y.
Johnson Gas Appliance Co., Cedar Rapids, Iowa
MacLeod Co., The, Cincinnati, Ohio
Mahr Mfg. Co., Div. Diamond Iron Works, Minneapolis, Minn.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
National Cylinder Gas Div., Chicago, Ill.
Ransome Co., Emeryville, Calif.
Selas Corp. of America, Philadelphia, Pa.
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.
White, L. B., Co., Onalaska, Wis.

BURNERS, Gas-Air

Bastian-Blessing Co., The, Chicago, Ill.
Clements Mfg. Co., Chicago 38, Ill.
Eclipse Fuel Engineering Co., Rockford, Ill.
Eisler Engineering Co., Inc., Newark, N. J.
Gas Appliance Service, Inc., Chicago, Ill.
Goss Gas, Inc., Glenshaw, Pa.
Hammon Precision Equipment Co., Oakland, Calif.
Harris Calorific Co., The, Cleveland, Ohio
Hauck Mfg. Co., Brooklyn 15, N. Y.
Hones, Charles A., Inc., Baldwin, L. I., N. Y.
Johnson Gas Appliance Co., Cedar Rapids, Ia.
Lindberg Engineering Co., Chicago, Ill.
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Harris Calorific Co., The, Cleveland, Ohio
Hauck Mfg. Co., Brooklyn, N. Y.
MacLeod Co., The, Cincinnati, Ohio
Mahr Mfg. Co., Div. Diamond Iron Works, Minneapolis, Minn.
Sandvik Saw & Tool (Division of Sandvik Steel, Inc.), New York, N. Y.
Scheu Products Co., Upland, Calif.
Wemco Products, Hazel Park, Mich.

BUTT and FLASH WELDERS

Acme Electric Welder Co., Los Angeles, Calif.
Acro Welder Mfg. Co., Milwaukee, Wis.
Agnew Electric Co., Milford, Mich.
Alphil Spot Welder Mfg. Co., Brooklyn, N. Y.
Ames Spot Welder Co., Inc., Brooklyn, N. Y.
ASEA Electric Inc., New York, N. Y.
Banner Welder, Inc., Milwaukee, Wis.
Delta Welder Corp., Detroit, Mich.
Eisler Engineering Co., Inc., Newark, N. J.
Electric Arc, Inc., Newark, N. J.
Expert Welding Mach. Co., The, Detroit, Mich.
Federal Mach. & Welder Co., The, Warren, Ohio
Goodrich Welding Equip. Corp., Hudsonville, Mich.
Larkin Welder & Machine Corp., Brooklyn, N. Y.
Link Welder Corp., Detroit, Mich.
Micro Products Inc., Chicago, Ill.
Multi-Hydromatic Welding & Mfg. Co., East Detroit, Mich.
National Electric Welding Mach. Co., Bay City, Mich.
Peer, Inc., Benton Harbor, Mich.
Precision Welder & Flexopress Corp., Cincinnati, Ohio
Progressive Welder Sales Co., Detroit, Mich.
Resistance Welder Corp., Bay City, Mich.
Sciaky Bros., Inc., Chicago, Ill.
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Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Thomson Electric Welder Co., Lynn, Mass.
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Vangtronic Corp., The, Bridgeport, Conn.
Weldex, Inc., Detroit, Mich.
Welding Machines Mfg. Co., Detroit, Mich.

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Acme Electric Welder Co., Los Angeles, Calif.
Ames Spot Welder Co., Inc., Brooklyn, N. Y.
Aro Spot Welders, Long Island City, N. Y.
Eisler Engineering Co., Inc., Newark, N. J.
Electric Arc, Inc., Newark, N. J.
Federal Tool Engineering Co., Cedar Grove, N. J.
Hoffman, Robt. W., Co., Inc., Chicago, Ill.
Peer, Inc., Benton Harbor, Mich.
Precision Welder & Flexopress Corp., Cincinnati, Ohio
Stryco Mfg. Co., San Francisco, Calif.
Taylor-Winfield Corp., Warren, Ohio
Universal Electric Sales Corp., Cleveland, Ohio

CABLE CONNECTORS

Albert & J. M. Anderson Mfg. Co., S. Boston, Mass.
Anthony, F. M. Co., Berkeley, Calif.
Ben-Nek Holder, Inc., Branford, Conn.
Bernard Welding Equipment Co., Chicago, Ill.
Cam-Lok Div., Empire Prod., Inc., Cincinnati, Ohio
Chicago Tool & Engineering Co., Chicago, Ill.
Craftsweld Equipment Corp., Long Island City, N. Y.
Fibre Metal Products Co., The, Chester, Pa.
Har-Worth Mfg. Co., Newark, N. J.
Jackson Products, Inc., Warren, Mich.
Jones, Howard B. Div., Chicago, Ill.
Joy Mfg. Co., Pittsburgh, Pa.
Lenco, Inc., Jackson, Mo.
Lincoln Electric Co., Cleveland, Ohio
Miller Elec. Mfg. Co., Inc., Appleton, Wis.
Pyle-National Co., Chicago, Ill.
Shober, Inc., Stockton, Calif.
Tweco Products, Inc., Wichita, Kan.

CABLE LUGS

(See "Welding Cable Lugs")

CABLE REELS

(See also "Hose and Cable Reels")

Heffner Products, Jackson, Mich.
United Specialties, Inc., El Dorado, Ark.

CABLE SPLICERS

Anthony, F. M., Berkeley, Calif.
Bernard Welding Equipment Co., Chicago, Ill.
Cam-Lok Div., Empire Prod., Inc., Cincinnati, Ohio
Fibre Metal Products Co., The, Chester, Pa.
Jackson Products, Inc., Warren, Mich.
Joy Mfg. Co., Pittsburgh, Pa.
Lenco, Inc., Jackson, Mo.
Sherman, H. B., Mfg. Co., Battle Creek, Mich.
Stevens, C. H., & Co., Inc., Cornwall Bridge, Conn.
Tweco Products, Inc., Wichita, Kan.
Velocity Power Tool Co., Pittsburgh, Pa.

CABLES, Inspection Equipment

(See: "Inspection Equipment, Cables")

CABLES, Power

(See "Welding Cables, Power")

CALCIUM CARBIDE

American Carbide & Chem. Co., St. Louis, Mo.
Linde Co., New York, N. Y.
Midwest Carbide Corp., Keokuk, Iowa

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National Cylinder Gas Div., Chicago, Ill.
Pacific Carbide & Alloys Co., Portland, Ore.
Shawinigan Products Corp., New York, N. Y.

CANVAS COVERS

A & A Mfg. Co., Inc. Milwaukee, Wis.
Aljay Mfg. Co., Inc., Philadelphia, Pa.
Associated Bag & Apron Co., Chicago, Ill.
Frommelt Industries, Dubuque, Ia.
General Scientific Equip. Co., Philadelphia, Pa.
Industrial Gloves Co., Danville, Ill.
Kimball Safety Prod. Co., Cleveland, Ohio
Paulsen-Webber Cordage Corp., New York, N. Y.
Racine Glove Co., Inc., Rio, Wis.
Robertson, A. L., Inc., Baltimore, Md.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Singer Glove Mfg. Co., Chicago, Ill.
Upson-Walton Co., The, Cleveland, Ohio
Wheeler Protective Apparel, Inc., Chicago, Ill.

CAPACITORS, Power Factor Correction

Aerovox Corp., New Bedford, Mass.
Cornell-Dubilier Elec. Co., S. Plainfield, N. J.
Deutschman Corp., Canton, Mass.
Westinghouse Electric Corp., Pittsburgh, Pa.

CAPES, BIBS and SLEEVES, Asbestos Fire Resistant and Duck and Leather

Adair, Robin W., Co., Avoca, N. Y.
Advance Glove Mfg. Co., Detroit, Mich.
Aljay Mfg. Co., Inc., Philadelphia, Pa.
American Optical Co., Southbridge, Mass.
Associated Bag & Apron Co., Chicago, Ill.
Boyer-Campbell Co., The, Detroit, Mich.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
Frommelt Industries, Dubuque, Ia.
General Scientific Equip. Co., Philadelphia, Pa.
Genter, C. D., Co., Chattanooga, Tenn.
Holcomb Safety Garment Co., Chicago, Ill.
Industrial Gloves Co., Danville, Ill.
Industrial Products Co., Philadelphia, Pa.
Johns-Manville, New York, N. Y.
Kimball Safety Prod. Co., Cleveland, Ohio
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Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Racine Glove Co., Inc., Rio, Wis.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Singer Glove Mfg. Co., Chicago, Ill.
Streichert, E. J., Chicago, Ill.
Tillman, John, & Co., Long Beach, Calif.
Twentieth Century Glove Corp. of Texas, Atlanta, Texas
University Leather Co., Berlin, Wis.
Wheeler Protective Apparel, Inc., Chicago, Ill.
Wickman Glove Co., Berkeley, Calif.

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Becker Bros. Carbon Co., Cicero, Ill.
Joseph Dixon Crucible Co., Jersey City, N. J.
National Carbon Div., Union Carbide Corp., New York, N. Y.
Ohio Carbon Co., Cleveland, Ohio
Pure Carbon Co., Inc., St. Marys, Pa.
Speer Carbon Co., St. Marys, Pa.
Stackpole Carbon Co., St. Marys, Pa.

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Air Reduction Sales Co., New York, N. Y.
Alabama Oxygen Company, Inc., Birmingham, Ala.
Burdett Oxygen Co., The, Cleveland, Ohio
Cardox Div., Chemetron Corp., Chicago, Ill.
Gaspro Ltd., Honolulu, Hawaii.
Independent Engineering Co., O'Fallon, Ill.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Pure Carbonic Co., New York, N. Y.
Sierra Oxygen Co., Reno, Nev.
Southern Oxygen Co., Washington, D. C.
Steele Gases Inc., Forest Park, Ill.
Superior Air Products Co., Newark, N. J.
Wolverine Gas Products, Inc., Saginaw, Mich.

CARBON DIOXIDE SHIELDED; FLUXED WELDING

Arcos Corp., Philadelphia, Pa.
Linde Co., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.

CARBON ELECTRODE HOLDERS

Air Reduction Sales Co., New York, N. Y.
Albert & J. M. Anderson Mfg. Co., Boston, Mass.
Arcair Co., Bremerton, Wash.
Fibre-Metal Prod. Co., The, Chester, Pa.
Hobart Bros., Troy, Ohio
Lincoln Electric Co., Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Precision Welder Mfg. Co., Chicago, Ill.
Tweco Products, Inc., Wichita, Kans.
Westinghouse Electric Corp., Buffalo, N. Y.

CARBON ELECTRODES

Arcair Co., Lancaster, Ohio
Atlas Welding Accessories, Inc., Ferndale, Mich.
Becker Bros. Carbon Co., Cicero, Ill.
Dixon Crucible Co., Joseph, Jersey City, N. J.
Lincoln Electric Co., The, Cleveland, Ohio
Metal & Thermit Corp., Rahway, N. J.
National Carbon Co., New York, N. Y.
Ohio Carbon Co., The, Cleveland, Ohio
Pure Carbon Co., St. Marys, Pa.
Speer Carbon Co., St. Marys, Pa.
Stackpole Carbon Co., St. Marys, Pa.

CARBON-ARC TORCHES

Air Reduction Sales Co., New York, N. Y.
Allen Electric and Equip. Co., Kalamazoo, Mich.
American Oxygen Service Corp., Harrison, N. J.
Arcair Co., Lancaster, Ohio
Borm Mfg. Co., Elgin, Ill.
Chicago Tool & Engineering Co., Chicago, Ill.
Electric Arc, Inc., Newark, N. J.
Ergolyte Mfg. Co., Philadelphia, Pa.
Fibre-Metal Products Corp., Skokie, Ill.
Forney Mfg. Co., Fort Collins, Colo.
Hammet Elec. Mfg. Co., Kansas City, Mo.
Harnischfeger Corp., Milwaukee, Wis.
Hobart Bros., Troy, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Mid-States Welder Mfg. Co., Chicago, Ill.
Miller Electric Mfg. Co., Inc., Appleton, Wis.
National Cylinder Gas Div., Chicago, Ill.
Philips, C. E., & Co., Detroit, Mich.
Precision Welder Mfg. Co., Chicago, Ill.
Trindl Products, Ltd., Chicago, Ill.
Tweco Products, Inc., Wichita, Kan.
Twentieth Century Mfg. Co., Minneapolis, Minn.
Westinghouse Electric Corp., Buffalo, N. Y.

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Clark Controller Co., The, Cleveland, Ohio
Ohio Carbon Co., Cleveland, Ohio
Speer Carbon Co., St. Marys, Pa.
Stackpole Carbon Co., St. Marys, Pa.

CASE HARDENING COMPOUNDS

All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Cyanamid Co., New York, N. Y.
Anti-Borax Compound Co., Inc., Fort Wayne, Ind.
Armor-Tuf Sales Co., New York, N. Y.
du Pont de Nemours, I. A. & Co., Inc., Wilmington, Delaware
Eutectic Welding Alloys Corp., Flushing, N. Y.
Hard-N-Tuff Corp., Huntington, N. Y.

CAST-IRON ELECTRODES

Air Reduction Sales Co., New York, N. Y.
Allied Weld-Craft, Inc., Indianapolis, Ind.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Arc Welders, Inc., Roseau, Minn.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Arcos Corp., Philadelphia, Pa.
Armite Laboratories, Los Angeles, Calif.
Champion Rivet Co., Cleveland, Ohio
Chicago Hardware Foundry Co., No. Chicago, Ill.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Gases Agamex, S. A., Mexico
General Electric Co., Schenectady, N. Y.
Harnischfeger Corp., Milwaukee, Wis.
Hobart Bros. Co., Troy, Ohio
Industrial Overlay Metals, Eaton, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
McKay Co., Pittsburgh, Pa.
Metal & Thermit Corp., Rahway, N. J.
Miller Electric Mfg. Co., Richmond, Ind.
National Cylinder Gas Div., Chicago, Ill.
Northeast Metals Co., Philadelphia, Pa.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Phillips, C. E. & Co., Detroit, Mich.
Reid-Avery Co., Baltimore, Md.
Resisto-Loy Co., S. W., Grand Rapids, Mich.
Sight Feed Generator Co., West Alexandria, Ohio
Smith, A. O., Corp., Milwaukee, Wis.
Standard Steel & Wire Co., Bolivar, Pa.
Welding Equipment & Supply Co., Detroit, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.

CAST-IRON FLUXES

Air Reduction Sales Co., New York, N. Y.
Allen, L. B., Co., Chicago, Ill.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
American Oxygen Service Corp., Harrison, N. J.
American Products Corp., Chicago, Ill.
American Solder & Flux Co., Philadelphia, Pa.
American Welding Alloys Corp., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Anti-Borax Compound Co., Inc., Ft. Wayne, Ind.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Burdett Oxygen Co., Cleveland, Ohio
Champion Rivet Co., Cleveland, Ohio
Chicago Hardware Foundry Co., North Chicago, Ill.
Columbia Chemical Products Co., Detroit, Mich.
Craftsweld Equip. Corp., Long Island City, N. Y.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Gases Agamex, S. A., Mexico
International Nickel Co., Inc., The, New York, N. Y.
Johnson Mfg. Co., Inc., Mount Vernon, Iowa
K-G Equipment Co., Allentown, Pa.
Klem Chemicals, Inc., Dearborn, Mich.
Krembs & Co., Chicago, Ill.
Linde Co., New York, N. Y.
Marquette Mfg. Co., Minneapolis, Minn.
Metal Bond Mfg. Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
Pal-Weld Mfg. Co., Seattle, Wash.
Permalatem Welding Alloys Inc., Red Bank, N. J.
Peterson Machine Tool Inc., Merriam, Kan.
Peterson, Welding Lab., Kansas City, Mo.
Phillips, C. E., & Co., Detroit, Mich.
Sight Feed Generator Co., West Alexandria, Ohio
Smith Welding Equipment Corp., Minneapolis, Minn.
Superior Flux & Mfg Co., Cleveland, Ohio
Victor Equipment Co., San Francisco, Calif.
Uniworld Research Corp. of America, Cleveland, Ohio
White, L. B., Co., Onalaska, Wis.
York Engineering Co., Chicago, Ill.

CAST-IRON WELDING RODS

Air Reduction Sales Co., New York, N. Y.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Oxygen Service Corp., Harrison, N. J.
American Welding Alloys Corp., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Champion Rivet Co., Cleveland, Ohio
Chicago Hardware Foundry Co., No. Chicago, Ill.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eastern Equipment Co., Willow Grove, Pa.
Eutectic Welding Alloys Corp., Flushing, N. Y.
International Nickel Co., Inc., New York, N. Y.
Linde Co., New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metal & Thermit Corp., Rahway, N. J.
National Cylinder Gas Div., Chicago, Ill.
National Welding Equipment Co., San Francisco, Calif.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys Inc., Red Bank, N. J.
Sight Feed Generator Co., West Alexandria, Ohio
Uniworld Research Corp., of America, Cleveland, Ohio
Weldit, Inc., Detroit, Mich.

CEMENT, Iron Repair

Hercules Chemical Co., Inc., New York, N. Y.
Smooth-in Mfg. Co., Jersey City, N. J.

CEMENT, Refractory and High Temperature

Armstrong Cork Co., Building Material Div., Lancaster, Pa.
Botfield Refractories Co., Philadelphia, Pa.
Carey, Philip Mfg. Co., The, Cincinnati, Ohio
Dixon, Joseph, Crucible Co., Jersey City, N. J.
Duromic Products, Inc., New York, N. Y.
Eagle-Picher Co., The, Cincinnati, Ohio
Ehret Magnesia Mfg. Co., Valley Forge, Pa.
General Refractories Co., Philadelphia, Pa.
Green, A. P., Fire Brick Co., Mexico, Mo.
Harbinson-Walker Refractories Co., Pittsburgh, Pa.
Hercules Chemical Co., Inc., New York, N. Y.
Johns-Manville, New York, N. Y.
Laclede-Christy Co., St. Louis, Mo.
Massillon Refractories Co., The, Massillon, Ohio
Mexico Refractories Co., Mexico, Mo.
National Carbon Co., Div. Union Carbide & Carbon Corp., New York, N. Y.
North American Refractories Co., Cleveland, Ohio
Quigley Co., Inc., New York, N. Y.
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Cleveland Chain & Mfg. Co., The, Cleveland, Ohio
International Chain & Mfg. Co., York, Pa.
Newhall Chain Forge & Iron Co., Westwood, N. J.
Ryerson, Joseph T., & Sons, Inc., Chicago, Ill.
Taylor, S. G. Chain Co., Inc., Hammond, Ind.
Western Chain Co. Chicago, Ill.
Yale & Towne Mfg. Co., The (Philadelphia Division), Philadelphia, Pa.

CHAIN HOISTS

Chester Hoist Div., National Screw & Mfg. Co., The, Lisbon, Ohio
Chicago Pneumatic Tool Co., New York, N. Y.
Chisholm-Moore Hoist Corp., Tonawanda, N. Y.
Cleveland Crane & Engineering Co., The, Wickliffe, Ohio
Coffing Hoist Co., Danville, Ill.
Columbus McKinnon Chain Corp., Tonawanda, N. Y.
Conco Engineering Works, Mendota, Ill.
Ford Chain Block Division of American Chain & Cable Co., Inc., York, Pa.
Harnischfeger Corp., Milwaukee, Wis.
Jeffrey Manufacturing Co., The, Columbus, Ohio
Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Division, Muskegon, Mich.
Master Electric Co., The, Dayton, Ohio
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Newhall Chain Forge & Iron Co., Westwood, N. J.
Philadelphia Chain Block & Mfg. Co., Inc., Philadelphia, Pa.
Reading Chain & Block Corp., Reading, Pa.
Robbins & Myers, Inc., Springfield, Ohio
Round, David, and Son, Cleveland, Ohio
Sasgen Derrick Co., Chicago, Ill.
Stephens-Adamson Mfg. Co. Aurora, Ill.
Taylor, S. G. Chain Co., Hammond, Ind.
Wright Hoist Division of American Chain & Cable Co., Inc., York, Pa.
Yale & Towne Mfg. Co., The (Philadelphia Division), Philadelphia, Pa.

CHAIN HOOKS

American Chain Division of American Chain & Cable Co., Inc., York, Pa.
Bethlehem Steel Co., Bethlehem, Pa.
Billings and Spencer Co., The, Hartford, Conn.
Bridgeport Chain & Mfg. Co., Bridgeport, Conn.

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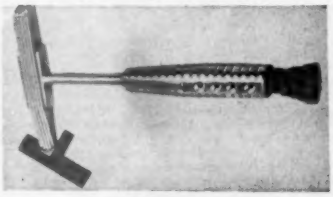

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McKay Co., The, York, Pa.
Newhall Chain Forge & Iron Co., Westwood, N. J.
Taylor, S. G., Chain Co., Inc., Hammond, Ind.
Upson-Walton Co., The, Cleveland, Ohio
Western Chain Co., Chicago, Ill.
Wiese Plow Welding Co., Inc., Perry, Iowa
Williams, J. H., & Co., Buffalo, N. Y.
Yale & Towne Mfg. Co., The (Philadelphia Division), Philadelphia, Pa.

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Columbus McKinnon Chain Corp., Tonawanda, N. Y.
Hercules Sling Co., Rockford, Ill.
International Chain & Mfg. Co., York, Pa.
Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Div., Muskegon, Mich.
Newhall Chain Forge & Iron Co., Westwood, N. J.
Olympic Glove Co., Inc., The, New York, N. Y.
Paulson-Webber Cordage Corp., New York, N. Y.
Round, David and Son, Cleveland, Ohio
Taylor, S. G., Chain Co., Inc., Hammond, Ind.
Youngstown Welding & Engineering Co., The, Youngstown, Ohio

CHESTS, Welding Equipment

Atlas Welding Accessories, Inc., Ferndale, Mich.
Union Steel Chest Corp., Le Roy, N. Y.

CHIPPING CHISELS, Hand

(See also: "Weld Cleaning Brushes, Tools, etc.")

Atlas Welding Accessories, Inc., Ferndale, Mich.
Bethlehem Steel Co., Bethlehem, Pa.
Bonney Forge & Tool Works, Allentown, Pa.
Cincinnati Tool Co., The, Cincinnati, Ohio
Damascus Steel Products Corp., Rockford, Ill.
Disston Div., H. K. Porter Co., Inc., Philadelphia, Pa.
Herbrand Tools, Fremont, Ohio
Leetonia Tool Co., The, Leetonia, Ohio
Millers Falls Co., Greenfield, Mass.
Plomb Tool Co., Los Angeles, Calif.
Pyramid Steel Co., Cleveland, Ohio
Quality Tools Corp., New Wilmington, Pa.
Youngstown Welding & Engineering Co., Youngstown, Ohio

CHIPPING CHISELS, Pneumatic and Electric Hammer

Bethlehem Steel Co., Bethlehem, Pa.
Black & Decker Mfg. Co., The, Towson, Md.
Chicago Pneumatic Tool Co., New York, N. Y.
Cleco Div., Reed Roller Bit Co., Houston, Texas
Damascus Steel Products Corp., Rockford, Ill.
Millers Falls Co., Greenfield, Mass.
Oxford Tool Co., Philadelphia, Pa.
Pyramid Steel Co., Cleveland, Ohio
Quality Tools Corp., New Wilmington, Pa.
Rotor Tool Co., Cleveland, Ohio
Schramm, Inc., West Chester, Pa.
Skil Corp., Chicago Ill.
Superior Pneumatic Div., Herbrand Tools, Cleveland, Ohio
Syntron Co., Homer City Pa.
Thor Power Tool Co., Chicago, Ill.

CHIPPING and SCALING HAMMERS (Electric)

Black & Decker Mfg. Co., The, Towson, Md.
Forney Mfg. Co., Ft. Collins, Colo.
Master Electric Co., The, Dayton, Ohio
Millers Falls Co., Greenfield, Mass.
Pyramid Steel Co., Cleveland, Ohio
Skil Corp., Chicago, Ill.
Stanley Electric Tools, New Britain, Conn.
Stow Mfg. Co., Binghamton, N. Y.
Syntron Co., Homer City, Pa.
Thor Power Tool Co., Chicago, Ill.
United States Electrical Tool Co., The, Cincinnati, Ohio
Wodack Electrical Tool Corp., Chicago, Ill.

CHIPPING and SCALING HAMMERS (Hand)

(See also: "Weld Cleaning Brushes, Tools, etc.")

Atlas Welding Accessories, Inc., Ferndale, Mich.
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Champion DeArment Tool Co., Meadville, Pa.
Chicago Mfg. & Distributing Co., Chicago, Ill.
Fibre-Metal Products Co., The, Chester, Pa.
Leetonia Tool Co., The, Leetonia, Ohio
Plumb, Fayette R., Inc., Philadelphia, Pa.
Ragle, J. M., Industries, Kansas City, Mo.
St. Pierre Chain Co., Worcester, Mass.
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Cleco Div., Reed Roller Bit Co., Houston, Texas
Gardner-Denver Co., Quincy, Ill.
Ingersoll-Rand Co., New York, N. Y.
Keller Tool Co., Grand Rapids, Mich.
Marindus Co., The, New York, N. Y.
Master Pneumatic Tool Co., Inc., Orwell, Ohio
Rotor Tool Co., Cleveland, Ohio
Salsbury Corp., Los Angeles, Calif.
Schramm, Inc., West Chester, Pa.
Skil Corp., Chicago, Ill.
Superior Manufacturing Co., Div. of Bingham Herbrand Corp., Cleveland, Ohio
Thor Power Tool Co., Chicago, Ill.
Wen-Lyn Products, Burbank, Calif.

CLAD STEEL, Copper

American Silver Co., Inc., Flushing, N. Y.
Lukens Steel Co., Coatesville, Pa.
Makepeace, D. E., Attleboro, Mass.

CLAD STEEL, Inconel

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Singer Glove Mfg. Co., Chicago, Ill.
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Crescent Tool Co., Jamestown, N. Y.
Dallett Co., The, Philadelphia, Pa.
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Kraeuter & Co., Inc., Newark, N. J.
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Ideal Industries, Inc., Sycamore, Ill.
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Permalatem Welding Alloys, Inc., Red Bank, N. J.
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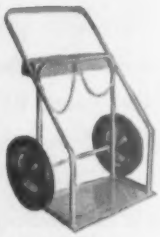

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Harris Calorific Co., The, Cleveland, Ohio
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Weldrite Co., Inc., Long Island City, N. Y.
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(See "Arc Welders, D-C")

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(See: "Leak Detectors")

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Oster Manufactring Co., The, Cleveland, Ohio
Pratt & Whitney Div., Niles-Bement-Pond Co., W. Hartford, Conn.
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Butterfield Division Union Twist Drill Co., Derby Line, Vt.
Capewell Mfg. Co., The, Hartford, Conn.
Card, S. W. Mfg. Co., Division of Union Twist Drill Co., Mansfield, Mass.
Champion Blower and Forge Co., Lancaster, Pa.
DoAll Co., The, Des Plaines, Ill.
Greenfield Tap & Die Corp., Greenfield, Mass.
Hollands Mfg. Co., Erie, Pa.
Mayhew Steel Products, Inc., Shelburne Falls, Mass.
Morse Twist Drill & Machine Co., New Bedford, Mass.
Nye Tool Co., Chicago, Ill.
Oster Manufacturing Co., The, Cleveland, Ohio
Pratt & Whitney, Div. Niles-Bement-Pond Co., West Hartford, Conn.
Ridge Tool Co., The, Elyria, Ohio
Threadwell Tap & Die Co., Greenfield, Mass.
Toledo Pipe Threading Machine Co., The, Toledo, Ohio

DIPPER TEETH REPOINTERS

(See: "Wedge Bars")

DIPPERS, Solder

American Pipe Tool Co., Chicago, Ill.
General Scientific Equip. Co., Philadelphia, Pa.
Harris, Arthur, & Co., Chicago, Ill.

DRILL-GRINDING ATTACHMENT

Atlas Press Co., Kalamazoo, Mich.
Dumore Co., Racine, Wis.
Hisely-Wolf Machine Co., Cincinnati, Ohio
Millers Falls Co., Greenfield, Mass.
Skil Corp., Chicago, Ill.
Standard Elec. Tool Co., The, Cincinnati, Ohio

DRILLING MACHINES

Atlas Press Co., Kalamazoo, Mich.
Black & Decker Mfg. Co., The, Towson, Md.
Blackford Mfg. Co., Inc., Hartford City, Ind.
Boice-Crane Co., Toledo, Ohio
Bradford Machine Tool Co., The, Cincinnati, Ohio
Canedy-Otto Mfg. Co., Chicago Heights, Ill.
Champion Blower & Forge Co., Lancaster, Pa.
Cincinnati Electrical Tool Co., The, Cincinnati, Ohio
Duro Metal Products Co., Chicago, Ill.
Famco Machine Co., Racine, Wis.
Hamilton Tool Co., The, Hamilton, Ohio
Independent Pneumatic Tool Co., Chicago, Ill.
Millers Falls Co., Greenfield, Mass.
Skil Corp., Chicago, Ill.
Standard Electrical Tool Co., The, Cincinnati, Ohio
Studebaker Machine Co. Chicago Ill.
Thor Power Tool Co., Chicago, Ill.
Walker-Turner Co., Inc., Plainfield, N. J.

DRILLS, Electric, Portable

Albertson & Co., Inc., Sioux City, Iowa
Black & Decker Mfg. Co., The, Towson, Md.
Bradford Machine Tool Co., The, Cincinnati, Ohio
Buckeye Tools Corp., Dayton, Ohio
Chicago Pneumatic Tool Co., New York, N. Y.
Cincinnati Electrical Tool Co., The, Cincinnati, Ohio
Cummins-Chicago Corp., Chicago, Ill.
Duro Metal Products Co., Chicago, Ill.
Haskins, R. G., Co., Chicago, Ill.
Ingersoll-Rand Co., New York, N. Y.
Millers Falls Co., Greenfield, Mass.
Milwaukee Electric Tool Corp., Milwaukee, Wis.
Misener Mfg. Co., Inc., Syracuse, N. Y.
Portable Electric Tools, Inc., Chicago, Ill.
Porter Cable Macihne Co., Syracuse, N. Y.
Rotor Tool Co., The, Cleveland, Ohio
Skil Corp., Chicago, Ill.

Speedway Mfg. Co., Cicero, Ill.
Standard Electric Tool Co., The, Cincinnati, Ohio
Stanley Electrical Tools, New Britain, Conn.
Stow Manufacturing Co., Inc., Binghamton, N. Y.
Syntron Company, Homer City, Pa.
Thor Power Tool Co., Chicago, Ill.
United States Electrical Tool Co., The, Cincinnati, Ohio
Van Dorn Electric Tool Co., The, Towson, Md.
Wodack Electric Tool Corp., Chicago, Ill.

DRILLS, Pneumatic, Portable

Albertson & Co., Inc., Sioux City, Iowa
Armite Industries Div., Armite Laboratories, Los Angeles, Calif.
Aro Equipment Corp., Bryan, Ohio
Bellows Co., Akron, Ohio
Black & Decker Mfg. Co., The, Towson, Md.
Buckeye Tools Corp., Dayton, Ohio
Chicago Pneumatic Tool Co., New York, N. Y.
Cleco Div., Reed Roller Co., Houston, Tex.
Gardner-Denver Co., Quincy, Ill.
Ingersoll-Rand Co., New York, N. Y.
Joy Mfg. Co., Pittsburgh, Pa.
Keller Tool Co., Grand Haven, Mich.
Master Pneumatic Tool Co., Inc., Orwell, Ohio
Rotor Tool Co., Cleveland, Ohio
Schramm, Inc., West Chester, Pa.
Skil Corp., Chicago, Ill.
Superior Pneumatic & Mfg. Co., Inc., Cleveland, Ohio
Thor Power Tool Co., Chicago, Ill.
Van Dorn Tool Co., Towson, Md.

DRILLS, Torch-Tip Cleaning

(See: "Tip-Cleaners")

DRILLS, Twist

Ace Drill Corp., Detroit, Mich.
Albertson Co., Inc., Sioux City, Iowa
Bay State Tap & Die Co., Mansfield, Mass.
Besly-Welles Corp., Beloit, Wis.
Chicago Latrobe Twist Drill Works, Chicago, Ill.
Clark Equipment Co., Buchanan, Mich.
Cleveland Twist Drill Co., The, Cleveland, Ohio
Cogsdill Twist Drill Co., Detroit, Mich.
Do All Co., The, Des Plaines, Ill.
Greenfield Tap & Die Corp., Greenfield, Mass.
Herbrand Tools, Fremont, Ohio
Morse Twist Drill & Machine Co., New Bedford, Mass.
National Twist Drill & Tool Co., Rochester, Minn.
Pratt & Whitney, Div. Niles-Bement-Pond Co., West Hartford, Conn.
Ragle, J. M., Industries, Kansas City, Mo.
Republic Drill & Tool Co., Chicago, Ill.
Standard Tool Co., Cleveland, Ohio
Threadwell Tap & Die Co., Greenfield, Mass.
Union Twist Drill Co., Athol, Mass.
Vascoloy-Ramet Corp., Waukegan, Ill.

DROP FORGED HOIST HOOKS

American Chain Division of American Chain & Cable Co., Inc., York, Pa.
Armstrong Bros. Tool Co., Chicago, Ill.
Bethlehem Steel Co., Bethlehem, Pa.
Billings & Spencer Co., Hartford, Conn.
Bullard, E. D. Co., Sausalito, Calif.
Cleveland Chain & Mfg. Co., Cleveland, Ohio
Columbus-McKinnon Chain Corp., Tonawanda, N. Y.
Dominion Bridge Co., Ltd., Montreal, Que., Canada
Ford Chain Block Division of American Chain & Cable Co., Inc. Philadelphia, Pa.
Laughlin, Thomas, Co., Portland, Me.
McKay Co., The, York, Pa.
Newhall Chain Forge & Iron Co., Westwood, N. J.
Roebling's John A., Sons Co., Trenton, N. J.
Taylor, S. G., Chain Co., Hammond, Ind.
Upson-Walton Co., The, Cleveland, Ohio
Wickwire Spencer-Steel Division, The Colorado Fuel & Iron Corp., Buffalo, N. Y.
Wilcox, Crittenden & Co., Inc., Middletown, Conn.
Williams, J. H., & Co., Buffalo, N. Y.
Yale & Towne Mfg. Co. The (Philadelphia Division), Philadelphia, Pa.

DRYING OVENS, Electrode

Archer, Fred C., Inc., Milwaukee, Wis.
Authauser Bros. Co., Albertson, L. I., N. Y.
Despatch Oven Co., Minneapolis, Minn.
Grieve & Hendry Co., Inc., Chicago, Ill.
Phoenix Products Co., Milwaukee, Wis.
Steiner-Ives Co., Newark, N. J.
Young Bros. Co., Cleveland, Ohio

DUAL-PASSAGE WELDING HOSE

(See also "Oxyacetylene Hose")

Hewitt-Robins, Inc., Stamford, Conn.
Linde Co., New York, N. Y.
Quaker Rubber Corp., Philadelphia, Pa.
Raybestos-Manhattan, Inc., Passaic, N. J.

DUST COLLECTORS

(See "Collectors, Exhausters and Blower Systems")

DUST HOODS and MASKS

American-LaFrance-Foamite Corp., Elmira, N. Y.
American Optical Co., Southbridge, Mass.
Bullard, E. D. Co., Sausalito, Calif.
DeVilbiss Co., The, Toledo, Ohio
Dockson Corp., Detroit, Mich.
Fibre Metal Products Co., The, Chester, Pa.
Flexo Products, Inc., Westlake, Ohio
Flood Safety Products Co., Chicago, Ill.
Frommelt Industries, Dubuque, Ia.
General Scientific Equipment Co., Philadelphia, Pa.
Glendale Optical Co., Inc., Valley Stream, N. Y
Goodrich, B. F., Co., The, Akron, Ohio
Industrial Gloves Co., Danville, Ill.
Industrial Products Co., Philadelphia, Pa.
Mine Safety Appliances Co., Pittsburgh, Pa.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Sellstrom Mfg. Co., Palatine, Ill.
Willson Prod., Inc., Reading, Pa.

DYE PENETRANTS

(See: "Inspection, Dye-Penetrant")

EAR PROTECTORS, Weldors

American Optical Co., Southbridge, Mass.
General Scientific Equip. Co., Philadelphia, Pa.
Kimball Safety Prod. Co., Cleveland, Ohio
McDonald B. F., Co., Los Angeles, Calif.
Mine Safety Appliances Co., Pittsburgh, Pa.
Pulmosan Safety Equipment Co., Brooklyn, N. Y.
Safety Clothing & Equipment Co., Cleveland, Ohio
Willson Products, Inc., Reading, Pa.

ELECTRIC HOISTS

American Hoist & Derrick Co., St. Paul, Minn.
Chester Hoist Div., National Screw & Mfg. Co., Lisbon, Ohio
Chisholm-Moore Hoist Corp., Tonawanda, N. Y.
Coffing Hoist Co., Danville, Ill.
Columbus-McKinnon Chain Corp., Tonawanda, N. Y.
Conco Engineering Works, Mendota, Ill.
Detroit Hoist & Machine Co., Detroit, Mich.
Dominion Bridge Co., Ltd., Montreal, Que., Canada
Ford Chain Block Division of American Chain & Cable Co., Inc., York, Pa.
Harnischfeger Corp., Milwaukee, Wis.
Ingersoll-Rand Co., New York, N. Y.
Jeffrey Manufacturing Co., The, Columbus, Ohio
Joy Mfg. Co., Pittsburgh, Pa.
Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Division, Muskegon, Mich.
Master Electric Co., The, Dayton, Ohio
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Northern Engineering Works, Detroit, Mich.
Reading Chain & Block Corp., Reading, Pa.
Revolvator Co., North Bergen, N. J.
Robbins & Meyers, Inc., Springfield, Ohio
Round, David and Son, Cleveland, Ohio
Sasgen Derrick Co., Chicago, Ill.
Stearns-Roger Mfg. Co., Denver, Colo.
Stephens-Adamson Mfg. Co., Aurora, Ill.
Stryco Mfg. Co., San Francisco, Calif.
Whiting Corp., Harvey, Ill.
Wright Hoist Division of American Chain & Cable Co., Inc., York, Pa.
Yale & Towne Mfg. Co., The (Philadelphia Division) Philadelphia, Pa.

ELECTRIC and PNEUMATIC PORTABLE SAWS

Albertson & Co., Inc., Sioux City, Iowa
Black & Decker Mfg. Co., The, Towson, Md.
Bradford Machine Tool Co., The, Cincinnati, Ohio
Chicago Pneumatic Tool Co., New York, N. Y.
Cummins-Chicago Corp., Chicago, Ill.
Heston & Anderson, Fairfield, Iowa
Ingersoll-Rand Co., New York, N. Y.
Mid-States Welder Mfg. Co., Chicago, Ill.
Millers Falls Co., Greenfield, Mass.
Milwaukee Electric Tool Corp., Milwaukee, Wis
Skil Corp., Chicago, Ill.
Stanley Electric Tools, New Britain, Conn.
Thor Power Tool Co., Chicago, Ill.
Van Dorn Electric Tool Co., Towson, Md.
Wysenbeek & Staff, Inc., Chicago, Ill.

ELECTRODE CARRIERS

A & A Mfg. Co., Inc., Milwaukee, Wis.
Aljay Manufacturing Co., Inc., Philadelphia, Pa.
American Oxygen Service Corp., Harrison, N. J.
Atlas Welding Accessories, Inc., Ferndale, Mich.
Boyer-Campbell Co., The, Detroit, Mich.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Ergolyte Mfg. Co., Philadelphia, Pa.
Fibre-Metal Prod. Co., Chester, Pa.
Industrial Prod. Co., Philadelphia, Pa.
Kimball Safety Prod. Co., Cleveland, Ohio

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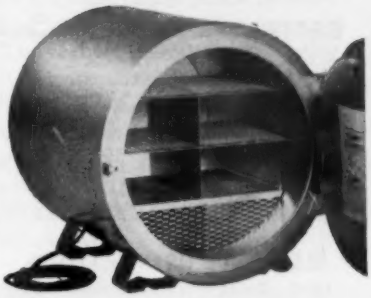

Mineral coated electrodes are *thirsty*. The instant you unpack them they start soaking up moisture . . within 2 hours often as much as 13 times US allowable specifications. Moist rods cause porosity, under-bead cracking, rough welds, etc. Rod scrap runs high Production slows down. Reworks eat up profits.

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Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Safety Clothing & Equip. Co., Cleveland, Ohio
Singer Glove Mfg. Co., Chicago, Ill.
Singer Leather Clothing Co., Philadelphia, Pa.
Tillman & Co., John, Long Beach, Cal.

ELECTRODE COATING MATERIALS

American Products Corp., Chicago, Ill.
Authauser Brothers Corp., Albertson, L. I., N. Y.
du Pont de Nemours, E. I., & Co., Inc., Wilmington, Del.
Foote Mineral Company, Philadelphia, Pa.
Hoeganaes Sponge Iron Corp., Riverton, N. J.
Metal & Thermit Corp., Rahway, N. J.
Philadelphia Quartz Co., Philadelphia, Pa.
Shieldalloy Corp., New York N. Y.
Shober, Inc., Stockton, Calif.
Thompson & Co., Oakmont, Pa.
Titanium Alloy Mfg. Div., New York, N. Y.

ELECTRODE DRESSERS, Resistance Welding

Acme Electric Welder Co., Los Angeles, Calif.
Air Reduction Sales Co., New York, N. Y.
Eisler Engineering Co., Inc., Newark, N. J.
Electroloy Co., Inc., Bridgeport, Conn.
Keller Tool Co., Grand Haven, Mich.
Mallory, P. R. & Co., Inc., Indianapolis, Ind.
Tipaloy, Inc., Detroit, Mich.
Universal Electric Sales Corp., Cleveland Ohio
Weldaloy Products Co., Van Dyke, Mich.
Tuffaloy Dept., Air Reduction Sales Co., Detroit, Mich.

ELECTRODE DRYING OVENS

(See: "Drying Ovens, Electrode," and "Electrode Storage Ovens")

ELECTRODE HOLDERS

Ben-Nek Holder, Inc., East Haven, Conn.
Bernard Welding Equipment Co., Chicago, Ill.
Cam-Lok Div., Empire Prod., Inc., Cincinnati, Ohio
Climax Corp., St. Paul, Minn.
Craftsweld Equip. Corp., Long Island City, N. Y.
Duro Engineering Co., Hamden, Conn.
Erico Products, Inc., Cleveland, Ohio
Fibre-Metal Products Co., Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
Frank Niemi Metal Products, Inc., Gurnee, Ill.
Hobart Bros. Co., Troy, Ohio
Jackson Products, Inc., Warren, Mich.
K-G Equipment Co., Inc., Allentown, Pa.
Lenco, Inc., Jackson, Missouri
Lincoln Electric Co., The, Cleveland, Ohio
Precision Welder Mfg. Co., Chicago, Ill.
Tweco Products, Inc., Wichita, Kan.
U. S. Electric Welder Corp., Toledo, Ohio
Wells Inc., Martin, Los Angeles, Cal.

ELECTRODE HOLDERS, Arc-Oxygen

Arcos Corp., Philadelphia, Pa.
Arcair Co., Lancaster, Ohio
Craftsweld Equipment Corp., Long Island City, N. Y.

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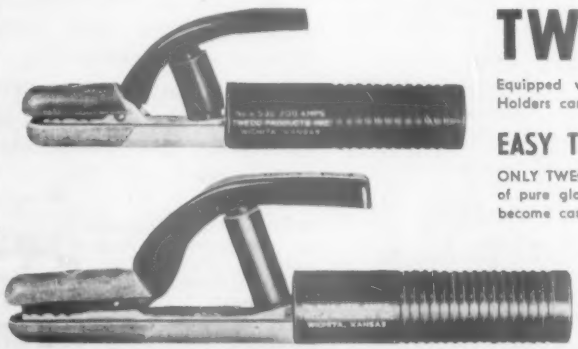
Acme Electric Welder Co., Los Angeles, Calif.
Albert & J. M. Anderson Mfg. Co., Boston, Mass.
Alphil Spot Welder Mfg. Corp., Brooklyn, N. Y.
American Electric Fusion Corp., Chicago, Ill.
Ames Spot Welder Co., Inc., Brooklyn, N. Y.
Ampco Metal, Inc., Milwaukee, Wis.
Delta Welder Corp., Detroit, Mich.
Eisler Engineering Co., Inc., Newark, N. J.
Federal Machine & Welder Co., Warren, Ohio
General Scientific Equip. Co., Philadelphia, Pa.
Goodrich Welding Equip. Corp., Hudsonville, Mich.
Hoffman, Robt. W. Co., Inc., Chicago, Ill.
Mallory, P. R., & Co., Inc., Indianapolis, Ind.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Peer, Inc., Benton Harbor, Mich.
Pike Products, Inc., Jackson, Mo.
S-M-S Corp., Detroit, Mich.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Thermex Equipment Co., Detroit, Mich.
Tipaloy, Inc., Detroit, Mich.
WW Alloys, Inc., Div. Fansteel Metallurgical Corp., Detroit, Mich.
Weldaloy Products Co., Van Dyke, Mich.
Weldex, Inc., Detroit, Mich.
Tuffaloy Dept., Air Reduction Sales Co., Detroit, Mich.



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Ferro Chrome (high and low carbon)	Ilmenite (Titanium Ore)	Ilmenite-RAF Grade (Titanium Ore)
Chromium Metal	Lithaflux (Lepidolite)	Lithaflux (Lepidolite)
Ferro Columbium	Lithium Carbonate (Commercial Grade)	Lithium Chloride
Columbium-Ferro Tantalum	Pariflux (Fluorspar)	Lithium Fluoride
Iron Powder, RZ-40	Pollucite	Magnetite (Iron Oxide, Black)
Manganese Metal-Electrolytic	Rutile (Titanium Ore)	Manganox
Ferro Manganese (high, med. and low carbon)	Tanarc	Pariflux (Fluorspar)
Ferro Silicon		Rutile (Titanium Ore)
Ferro Titanium		Tanarc
Ferro Vanadium		Zircon (Zirconium Silicate)

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ELECTRODE HOLDERS, Tig

Air Reduction Sales Co., New York, N. Y.
Argopen Co., No. Syracuse, N. Y.
Bernard Welding Equipment Co., Chicago, Ill.
Linde Co., New York, N. Y.
Metal & Thermit Corp., Rahway, N. J.
National Cylinder Gas Div., Chicago, Ill.
Tec Torch Co., Inc., Carlstadt, N. J.
Wilson Equipment Corp., Paterson, N. J.

ELECTRODE KITS

(See: "Arc Electrode Kits")

ELECTRODE PROCESSING EQUIPMENT

Authauser Bros., Albertson, L. I., N. Y.
Moslo Machinery Co., Cleveland, Ohio
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Yoder Co., Cleveland, Ohio

ELECTRODES

(See aluminum, cast-iron, mild-steel, etc., electrode categories)

ELECTRODE-STORAGE OVENS

Archer, Fred C., Inc., Milwaukee, Wis.
Despatch Oven Co., Minneapolis, Minn.
Lewis Welding & Engrg. Corp., Bedford, Ohio
Grieve-Hendry Co., Chicago, Ill.
Phoenix Products Co., Milwaukee, Wis.
Rotir Co., Bell Gardens, Calif.

ELECTRON-BEAM WELDERS

Air Reduction Sales Co., New York, N. Y.
High Vacuum Equipment Corp., Hingham, Mass.
NRC Equipment Corp., Newton, Mass.

ELECTRONIC CONTACTORS

Clark Controller Co., The, Cleveland, Ohio
Eisler Engineering Co., Inc., Newark, N. J.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Peer, Inc., Benton Harbor, Mich.
Robotron Corp., Detroit, Mich.
Sciaky Bros., Chicago, Ill.
Square D Co., Milwaukee, Wis.
Taylor-Winfield Corp., Warren, Ohio
Weldaloy Products Co., Van Dyke, Mich.
Weltronic Co., Detroit, Mich.
Westinghouse Electric Corp., Pittsburgh, Pa.

ELECTRONIC CONTROLS, Flame-Cutting

Air Reduction Sales Co., New York, N. Y.
Industrial Scientific Co., New York, N. Y.
Linde Co., New York, N. Y.
Messer Cutting Machines, Inc., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
Struthers Wells Corp., Titusville, Pa.
Westinghouse Electric Corp., Buffalo, N. Y.

ELECTRONIC CONTROLS, Resistance-Welding

(See also: "Resistance-Welding Controls," "Resistance-Welding Timers")

Acro Welder Mfg. Co., Milwaukee, Wis.
Bristol Co., The, Waterbury, Conn.
Eisler Engineering Co., Inc., Newark, N. J.
Electrical Industries, Inc., Newark, N. J.
Electric Controller & Mfg. Co., The, Cleveland, Ohio
Federal Machine & Welder Co., Warren, Ohio
Federal Tool Engineering Co., Cedar Grove, N. J.
Ferrara Inc., Oak Park, Mich.
General Electric Co., Specialty Control Dept., Waynesboro, Va.
Goodrich Welding Equip. Corp., Hudsonville, Mich.
Hercules Elec. & Mfg. Co., Inc., Brooklyn, N. Y.
Hoffman, Robt. W. Co., Inc., Chicago, Ill.
Martin Electric Div., Thompson Industries, Detroit, Mich.
National Time & Signal Corp., Detroit, Mich.
Oxo Welding Equipment Co., New Lenox, Ill.
Peer, Inc., Benton Harbor, Mich.
Photovolt Corp., New York, N. Y.
Progressive Welder Co., Detroit, Mich.
Raytheon Mfg. Co., Waltham, Mass.
Robotron Corp., Detroit, Mich.
Sciaky Bros., Chicago, Ill.
Square-D Co., Milwaukee, Wis.
Taylor-Winfield Corp., Warren, Ohio
Vacuum Tube Products Co., Oceanside, Calif.
Vangtronic Corp., The, Bridgeport, Conn.
Weldaloy Products Co., Van Dyke, Mich.
Weltronic Co., Detroit, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.

ELECTRONIC TUBES

Amperex Electronic Corp., Hicksville, N. Y.
Eisler Engineering Co., Inc., Newark, N. J.
Electrons, Inc., Newark, N. J.
Federal Telephone & Radio Corp., Clifton, N. J.
General Electric Co., Power Tube Dept., Schenectady, N. Y.
Ken-Rad Tube and Lamp Corp., Owensboro, Ky.
Machlett Laboratories, Inc., Springdale, Conn.
Martin Electric Div., Thompson Industries, Detroit, Mich.
National Electronics, Inc., Geneva, Ill.
Peer, Inc., Benton Harbor, Mich.
Radio Corp. of America, Tube Division, Harrison, N. J.
Raytheon Mfg. Co., Waltham, Mass.
Sylvania Electric Prods., Inc., Towanda, Pa.
Vacuum Tube Products Co., Oceanside, Calif.
Vangtronic Corp., The, Bridgeport, Conn.
Westinghouse Electric Corp., Elmira, N. Y.

EMERY and Other Abrasives

Abrasive Products, Inc., South Braintree, Mass.
Armour & Co., Alliance, Ohio
Bay State Abrasive Products, Westboro, Mass.
Behr-Manning Div., Troy, N. Y.
Carborundum Co., The, Niagara Falls, N. Y.
Chicago Wheel & Mfg. Co., Chicago, Ill.
Haskins, R. G., Co., Chicago, Ill.
Hoffman, R. W. Co., Chicago, Ill.
Macklin Co., Jackson, Mich.
Michigan Abrasive Co., Detroit, Mich.
Mid-West Abrasive Co., Owosso, Mich.
Minnesota Mining & Mfg. Co., St. Paul, Minn.
Norton Co., Worcester, Mass.
Simonds Worden White Co., Dayton, Ohio

ENGINES, Air Cooled

International Fermont Mach. Co., Inc., Ramapo, N. Y.
Kohler Corp., Kohler, Wis.
Lincoln Electric Co., The, Cleveland, Ohio
Onan, D. W., & Sons, Inc., Minneapolis, Minn.
Wisconsin Motor Corp., Milwaukee, Wis.

EXHAUST FANS

Air Controls, Inc., Cleveland, Ohio
American Blower Corp., Dearborn, Mich.
Autovent Fan & Blower Div., Herman Nelson Corp., Chicago, Ill.
Baldor Electric Co., St. Louis, Mo.
Chelsea Fan & Blower Co., Plainfield, N. J.
Clarage Fan Co., Kalamazoo, Mich.
Coppus Engineering Corp., Worcester, Mass.
DeBothezat Fans Div., American Mach. & Metals, Inc., East Moline, Ill.
De Vilbiss Co., The, Toledo, Ohio
Eagle-Picher Co., The, Cincinnati, Ohio
Electric Blower Co., Boston, Mass.
Elliott Mfg. Co., Binghamton, N. Y.
Engwald Corp., Inwood, L. I., N. Y.
General Blower Co., Morton Grove, Ill.
Hisey-Wolf Mach Co., Cincinnati, Ohio
Ilg Electric Ventilating Co., Chicago, Ill.
Jeffrey Mfg. Co., The, Columbus, Ohio
MacLeod Co., The, Cincinnati, Ohio
Mine Safety Appliances Co., Pittsburgh, Pa.
Nelson, Herman, Div., American Air Filter Co., Inc., Moline, Ill.
Paasche Airbrush Co., Chicago, Ill.
Robbins & Myers, Inc., Springfield, Ohio
Ruemelin Mfg. Co., Milwaukee, Wis.
Sturtevant, B. F., Co., Boston, Mass.
Swartwout Co., The, Cleveland, Ohio
Torit Mfg. Co., St. Paul, Minn.
Victor Electric Products, Inc., Cincinnati, Ohio

EXTRACTORS, Bolt and Screw

Bonny Forge & Tool Works, Allentown, Pa.
Chicago Latrobe Twist Drill Works, Chicago, Ill.
Cleveland Twist Drill Co., The, Cleveland, Ohio
Duro Metal Products Co., Chicago, Ill.
Greenfield Tap & Die Corp., Greenfield, Mass.
Owatonna Tool Co., Owatonna, Minn.
Plomb Tool Co., Los Angeles, Calif.
Quality Tools Corp., New Wilmington, Pa.
Ridge Tool Co., The, Elyria, Ohio (Also pipe.)
Standard Tool Co., Cleveland, Ohio

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Detroit First Aid Co., Detroit, Mich.
Hydraulic Press Mfg. Co. The, Mount Gilead, Ohio

EYE DROPS

Ashton's Pharmacist, Youngstown, Ohio
Atlas Welding Accessories, Inc., Ferndale, Mich.
Carhoff Co., Cleveland, Ohio
Davis Emergency Equipment Co., Inc. Newark, N. J.
Detroit First Aid Co., Detroit, Mich.
General Scientific Equip. Co., Philadelphia, Pa.
Murine Co., Chicago, Ill.
Safety Clothing & Equipment Co., Cleveland, Ohio

FACE SHIELDS

(See also: "Helmets, Arc Welding")

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American Optical Co., Southbridge, Mass.
Boyer-Campbell Co., Detroit, Mich.
Burdett Oxygen Co., Cleveland, Ohio
Chicago Eye Shield Co., Chicago, Ill.
Davis Emergency Equip. Co., Inc., Newark, N. J.
Dockson Corp., Detroit, Mich.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Eastern Safety Equipment Co., New York, N. Y.
Fendall Co., Chicago, Ill.
Fibre-Metal Prod. Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
Frommelt Industries, Dubuque, Ia.
General Scientific Equip. Co., Philadelphia, Pa.
Glendale Optical Co., Inc., Valley Stream, N. Y.
Hobart Bros. Co., Troy, Ohio
Industrial Products Co., Philadelphia, Pa.
Jackson Products Inc., Warren, Mich.
Kedman Co., Salt Lake City, Utah
Metro Mfg. Co., Long Island City, N. Y.
Mine Safety Appliances Co., Pittsburgh, Pa.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Parker Safety Equipment Co., Irvington, N. J.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Sellstrom Mfg. Co., Palatine, Ill.
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Wilkie Optical, Inc., Barrington, N. J.
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The MUSKETEER Headgear, durable, comfortable and convenient, has Nylon headband and friction pivots, adjustable while in use. Cross strap adjusts to height, wide spark deflector carries a choice of visors:

1. Fiber Visor with welding lens for scarfing and furnace work
2. Metal-bound plastic visor in 3 depths
3. Wide plastic visor (shown) in choice of thickness, clear and in shades of green
4. Wire screen visor.

Also: Jackson's type J-1 and BX Eyeshields, Goggles and Welding Helmets, Safety Hat and Face Shield Combinations.

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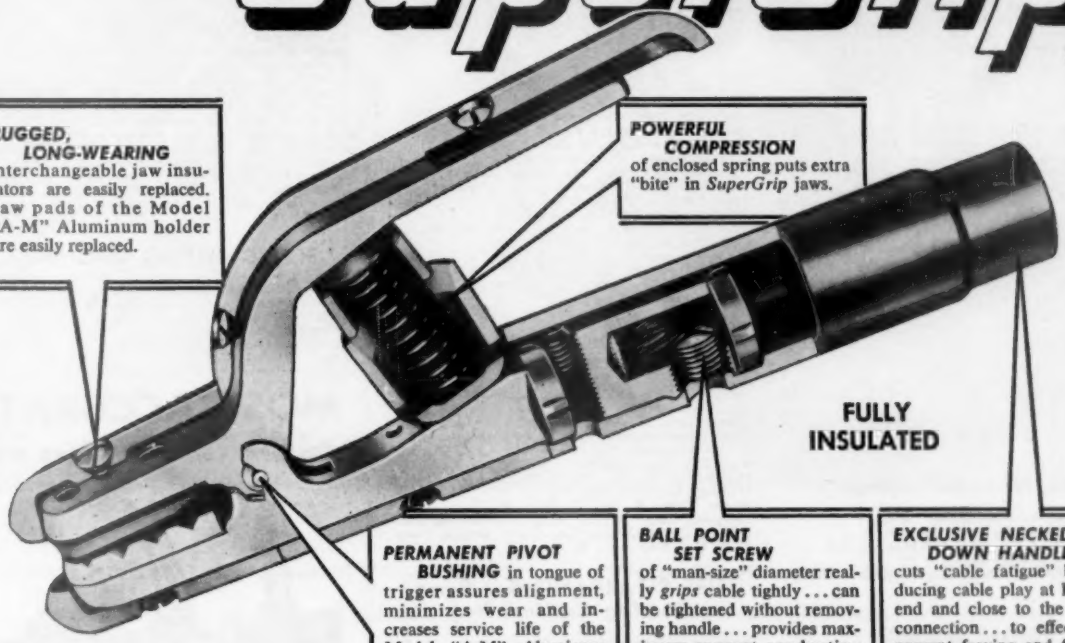

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It's the most! Not just continuously cool ... *SuperGrip* is the Welding Electrode Holder designed to eliminate not just one or two, *but* EVERY awkward, irritating, troublesome design point ever built into an ordinary holder! No more frayed cables! ***No more over-heated holders! Now you get the neat, compact design that increases maneuverability and minimizes work fatigue!***

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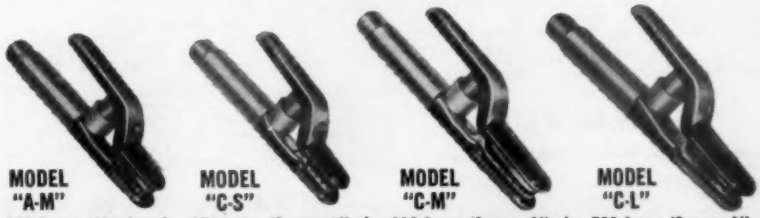

MODEL "A-M" 300 Amps. (Aluminum) for ¼" Weld Rod

MODEL "C-S" 250 Amps. (Copper Alloy) for 7/32" Weld Rod

MODEL "C-M" 300 Amps. (Copper Alloy) for ¼" Weld Rod

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Knudson, E. C., Chicago, Ill.
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Manufacturers Brush Co., The, Cleveland, Ohio
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Plumb, Inc., Fayette R., Philadelphia, Pa.
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FILES

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DoAll Co., The, Des Plaines, Ill.
Dremel Mfg. Co., Racine, Wis.
Elliot Mfg. Co., New York, N. Y.
Flint Prod. Co., Brooklyn, N. Y.
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Graham Rotary File & Tool Co., Philadelphia, Pa.
Haskins, R. G. Co., Chicago, Ill.
Heller Tool Co., Newcomerstown, Ohio
Ideal Industries, Inc., Sycamore, Ill.
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Nicholson File Co., Providence, R. I.
Plumb, Fayette R., Inc., Philadelphia, Pa.
Pratt & Whitney, Div. Niles-Bement-Pond Co., West Hartford, Conn.
Simonds Saw & Steel Co., Fitchburg, Mass.
Stow Mfg. Co., Binghamton, N. Y.

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Eisler Engineering Co., Inc., Newark, N. J.
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Tipaloy, Inc., Detroit, Mich.
Tuffaloy Dept., Air Reduction Sales Co., Detroit, Mich.

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Safety First Supply Co., Pittsburgh, Pa.
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Victor Equipment Co., San Francisco, Calif.
Wheeler Protective Apparel, Inc., Chicago, Ill.

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Harbison-Walker Refractories Co., Pittsburgh, Pa.
Johns.-Manville, New York, N. Y.
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Massillon Refractories Co., The, Massillon, Ohio
Mexico Refractories Co., Mexico, Mo.
Niles Fire Brick Co., The, Niles, Ohio
North American Refractories Co., Cleveland, Ohio
Norton Co., Worcester, Mass.
Plibrico Jointless Firebrick Co., Chicago, Ill.
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Johns-Manville, New York, N. Y.
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North American Refractories Co., Cleveland, Ohio
Norton Co., Worcester, Mass.
Quigley Co., Inc., New York, N. Y.
Wagner Mfg. Co., Inc., Jackson, Mo.

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C-O Two Fire Equipment Co., Newark, N. J.
Diener, Geo. W., Mfg. Co., Chicago, Ill.
General Detroit Corp., The, Detroit, Mich.
Grinnell Co., Providence, R. I.
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Kidde, Walter, & Co., Inc., Belleville, N. J.
Miller-Peerless Mfg. Co., Chicago, Ill.
Parker, W. D., Inc., New York, N. Y.
Pulmosan Safety Equipment Co., Brooklyn, N. Y.
Pyrene Mfg. Co., Newark, N. J.
Randolph Laboratories, Chicago, Ill.
Safety-First Products Corp., Elmsford, N. Y.
Stop-Fire, Inc., Monmouth, N. J.

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Gates Rubber Co., The, Denver, Colo.
Goodall Rubber Co., Trenton, N. J.
Goodrich, B. F., Co., The, Akron, Ohio
Goodyear Tire & Rubber Co., Inc., Akron, Ohio
Hewitt-Robins Inc., Stamford, Conn.
Home Rubber Co., The, Trenton, N. J.
New York Belting & Packing Co., Passaic, N. J.
Pyrene Mfg. Co., Newark, N. J.
Quaker Rubber Corp., Philadelphia, Pa.
Raybestos-Manhattan, Inc., Passaic, N. J.
Republic Rubber Div., Lee Rubber & Tire Corp., Youngstown, Ohio

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Clayton & Lambert Mfg. Co., Louisville, Ky.
Diener, Geo. W., Mfg. Co., Chicago, Ill.
Eclipse Fuel Engineering Co., Rockford, Ill.
Falcon Equipment Co., New Brighton, Pa.
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Hollands Mfg. Co., Erie, Pa.
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duPont, E. I., de Nemours & Co., Inc., Wilmington, Del.
Holcomb Safety Garment Co., Chicago, Ill.
Industrial Gloves Co., Danville, Ill.
Metal & Thermit Corp., Rahway, N. J.
Quaker Chemical Prod. Corp., Conshohocken, Pa.
Wayne Chemical Products Co., Detroit, Mich.

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Carter-Lockard Co., Los Angeles, Calif.
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Eastern Safety Equipment Co., New York, N. Y.
General Scientific Equip. Co., Philadelphia, Pa.
Halperin Co., Inc., A. E., Boston, Mass.
Industrial Products Co., Philadelphia, Pa.
McDonald, B. F., Co., Los Angeles, Calif.
Mine Safety Appliances Co., Pittsburgh, Pa.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety Clothing & Equip. Co., Cleveland Ohio
Safety First Supply Co. Pittsburgh Pa.

FITTINGS, Pipe Welding

(See: "Welding Fittings")

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Agnew Electric Co., Milford, Mich.
Airline Welding & Engineering, Hawthorne, Calif.
Automatic Welding Co., Waukesha, Wis.
Automatic Welding Co., Tulsa, Okla.
Automation Machines & Equipment Co., Inc., Milwaukee, Wis.
Cayuga Machine & Fabr. Co., Inc., Depew, N. Y.
Delta Welder Corp., Detroit, Mich.
Duramic Products Inc., New York, N. Y.
Goodrich Welding Equipment Corp., Hudsonville, Mich.
Herrick, C. B., Co., Cleveland, Ohio
Hobart Bros. Co., Troy, Ohio
Lewis Welding & Engrg. Co., Bedford, Ohio
Morton Mfg. Co., Muskegon Heights, Mich.
Pandjiris Weldment Co., St. Louis, Mo.
Peck, Cecil C., Co., Cleveland, Ohio
Progressive Welder Sales Co., Detroit, Mich.
Swift Electric Welder Co., Detroit, Mich.
Unique Equipment Inc., Brooklyn, N. Y.
World Electric Co., Cleveland, Ohio

FIXTURES, Welding

(See: "Jigs, Fixtures and Manipulators," and "Positioners")

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Air Reduction Sales Co., New York, N. Y.
American Oxygen Service Corp., Harrison, N. J.
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Cut-O-Guide Sales Co., Cleveland, Ohio
General Welding & Equip. Co., Boston, Mass.
Harris Calorific Co., The, Cleveland, Ohio
Har-Worth Mfg. Co., Newark, N. J.
K-G Equipment Co., Inc., Allentown, Pa.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Milburn, Alexander, Inc., Baltimore, Md.
Modern Engineering Co., St. Louis, Mo.
Shrader, F. W., Co., Culver City, Calif.
Victor Equipment Co., San Francisco, Calif.

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Cogmatic Co., Milwaukee, Wis.
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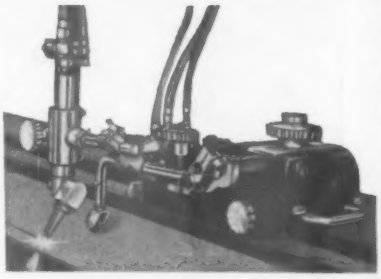
Portable cutting machine made



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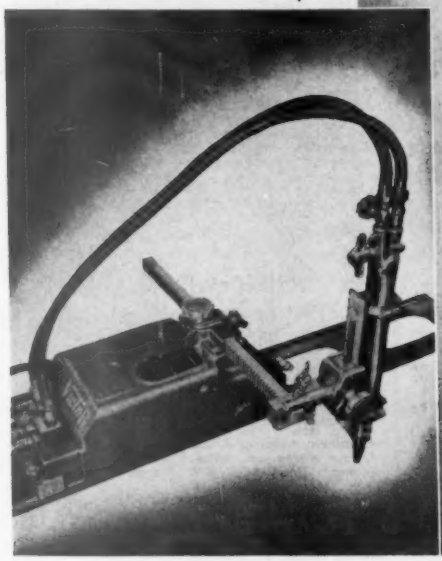
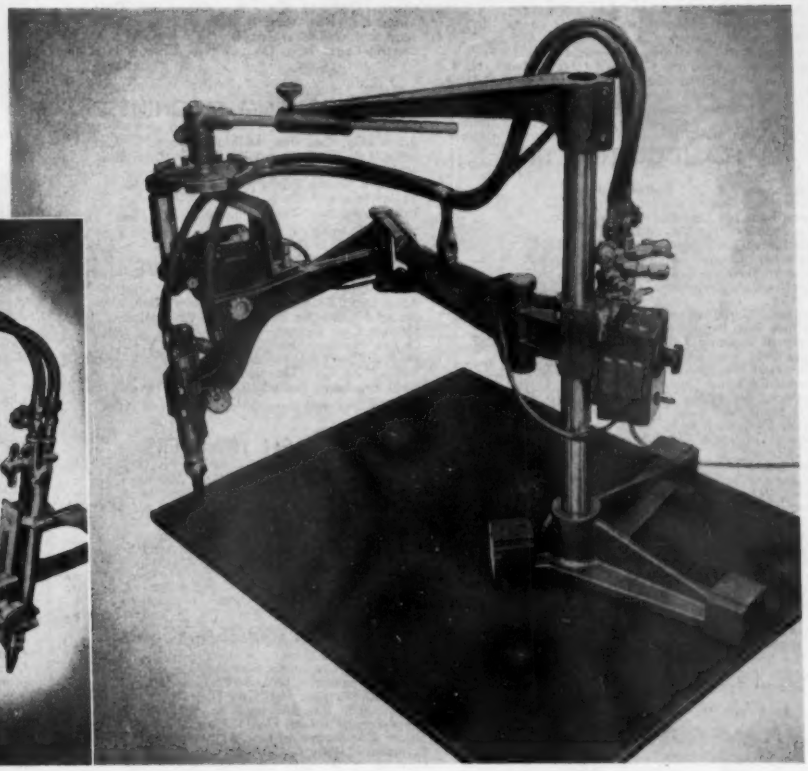
DUPLICUTTER MODEL DC-2000
For cutting shapes →

FLAME CUTTER VU-120
For straight and circle cutting ↓





Victor Flame Cutter, Model VU-120

- Cuts straight lines, square or bevel kerfs, circles to 96″ diameter.
- Adaptable to submerged or inert arc automatic welding.
- Travels 0 to 180″ per minute forward or reverse; variable speed transmission provides full power over entire range.
- Free-wheeling neutral for easy positioning.
- Accommodates both 2 and 3-hose torches, with or without gear rack.
- Second torch holder available for parallel cutting.

Victor Duplicutter, Model DC-2000

- Duplicates shapes up to 19½″ diameter circles, 12″ x 35″ rectangles.
- Holds tolerances of plus or minus 1/64″ in 2″ steel.
- Templates easily changed, making practical both long runs or a single copy.
- Weight, 36 lbs. — easily carried.
- Magnetized feet set on stock being cut — no levelling needed.
- Uses Victor cutting tips thru size 5.

To see how Victor Cutting Machines can speed your production, ask your Victor dealer for a demonstration . . . or write us for descriptive Bulletin 353.

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Linde Co., New York, N. Y.
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Oxo Welding Equipment Co., New Lenox, Ill.
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Acetylene Supply Co., Linden, N. J.
Adapt-All Tip Co., Los Angeles 5, Cal.
Air Products, Inc., Allentown, Pa.
Air Reduction Sales Co., New York, N. Y.
American Oxygen Service Corp., Harrison, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Craftsweld Equipment Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
Eclipse Fuel Engineering Co., Rockford, Ill.
General Welding & Equipment Co., Boston, Mass.
Goss Gas, Inc., Glenshaw, Pa.
Hammon Precision Equipment Co., Oakland, Calif.
Harris Calorific Co., The, Cleveland, Ohio
Imperial Brass Mfg. Co., The, Chicago, Ill.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Minneapolis, Minn.
Milburn, Alexander, Inc., Baltimore, Md.
Miles, John R. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
National Welding Equip. Co., San Francisco, Calif.
Oxo Welding Equipment Co., New Lenox, Ill.
Smith Welding Equip. Corp., Minneapolis, Minn.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Texas Delta Development Corp., Lockhart, Texas
The Trippe Supply Co., Baltimore, Md.
Universal Cutting & Welding Equip. Mfg. Co., Ft. Lauderdale, Fla.
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.
Worcester Taper Pin Co., Worcester, Mass.

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Acetylene Supply Co., Linden, N. J.
Air Products, Inc., Allentown, Pa.
Air Reduction Sales Co., New York, N. Y.
Bastian-Blessing Co., The, Chicago, Ill.
Craftsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
General Welding & Equip. Co., Boston, Mass.
Goss Gas, Inc., Glenshaw, Pa.
Hammon Precision Equipment Co., Oakland, Calif.
Harris Calorific Co., The, Cleveland, Ohio
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Milburn, Alexander, Inc., Baltimore, Md.
Miles, John R. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
National Welding Equip. Co., San Francisco, Calif.
Smith Welding Equip. Corp., Minneapolis, Minn.
S-S Co., Brooklyn, N. Y.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Universal Cutting & Welding Equip. Mfg. Co., Ft. Lauderdale, Fla.
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.
Worcester Taper Pin Co., Worcester, Mass.

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Dockson Corp., Detroit, Mich.
Gas Appliance Service, Inc., Chicago, Ill.
Gaso Equipment Co., Chicago, Ill.
Harris Calorific Co., The, Cleveland, Ohio
K-G Equipment Co., Inc., Allentown Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
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Weldit, Inc., Detroit, Mich.

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Linde Co., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
Stearns-Roger Mfg. Co., Denver, Colo.

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Kling Bros. Engineering Works, Chicago, Ill.
McCabe Mfg. Co., Lawrence, Mass.
Niagara Mach. & Tool Works, Buffalo, N. Y.
Taylor-Winfield Corp., Warren, Ohio
Tube Turns, Inc., Louisville, Ky.

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Milburn Co., Detroit, Mich.
Oakite Products, Inc., New York, N. Y.
Wayne Chemical Products Co., Detroit, Mich.
Wolfe-Kote Co., Sheboygan, Wis.
York Engineering Co., Chicago, Ill.

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National Elec. Welding Machines Co., Bay City, Mich.
Stryco Mfg. Co., San Francisco, Calif.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Whiting Corp., Harvey, Ill.

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Dumore Co., The, Racine, Wis.
Duro Metal Products Co., Chicago, Ill.
Elliott Manufacturing Co., Binghamton, N. Y.
Foredom Electric Co., New York, N. Y.
Haskins, R. G., Co., Chicago, Ill.
Ideal Industries, Inc., Sycamore, Ill.
Jarvis, Chas. L., Co., Middletown, Conn.
Jefferson Engineering & Mfg. Co., Detroit, Mich.
Master Vibrator Co., Dayton, Ohio
Pratt & Whitney Div., Niles-Bement-Pond Co., West Hartford, Conn.
Stow Mfg. Co., Binghamton, N. Y.
Swartz & White Mfg. Co., Binghamton Flexible Shaft Division, Binghamton, N. Y.
United States Electrical Tool Co., The, Cincinnati, Ohio
Wyzenbeek & Staff, Inc., Chicago, Ill.

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Elliott Manufacturing Co., Binghamton, N. Y.
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Hewitt-Robins Co., Stamford, Conn.
Jefferson Engineering & Mfg. Co., Detroit, Mich.
Jeffrey Mfg. Co., The, Columbus, Ohio
Master Electric Co., The, Dayton, Ohio
Pratt & Whitney Div. Niles-Bement-Pond Co., West Hartford, Conn.
Stow Mfg. Co., Binghamton, N. Y.
Swartz & White Mfg. Co., Binghamton Flexible Shaft Division, Binghamton, N. Y.
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Balmar, Franklin Corp., Baltimore, Md.
Elliott Mfg. Co., Binghamton, N. Y.
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Hoffman, R. W. Co., Inc., Chicago, Ill.
Jarvis, Chas. L., Co., Middletown, Conn.
Pratt & Whitney Div., Niles-Bement-Pond Co., W. Hartford, Conn.
Stow Mfg. Co., Binghamton, N. Y.
Wyzenbeek & Staff, Inc., Chicago, Ill.

FLINT, For Gas Lighters

Dockson Corp., Detroit, Mich.
Flint Products Co., Brooklyn, N. Y.
Fuller, G. C., Mfg. Co., Cincinnati, Ohio
Linde Co., New York, N. Y.
Matchless Utilities Co., New York, N. Y.
Metro Mfg. Co., Long Island City, N. Y.
Ragle, J. M., Industries, Kansas City, Mo.
Randall Mfg. Co., Kansas City, Mo.
Safety Gas Lighter Co., Lynn, Mass.

FLUE and TUBE CUTTERS

American Pipe Tool Co., Chicago, Ill.
Calder Mfg. Co., Lancester, Pa.
Parker Appliances Co., The, Cleveland, Ohio
Vincent Steel Process Co., Detroit, Mich.
Vogel Tool & Die Corp., Melrose Park, Ill.

FLUORESCENT EQUIPMENT

(See: "Inspection Equipment, Fluorescent")

FLUX DISPENSERS

Airline Welding and Engineering, Hawthorne, Calif.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Gasflux Co., The, Mansfield, Ohio
Herrick, C. B. Mfg. Co., Cleveland, Ohio
Lincoln Electric Co., Cleveland, Ohio
Linde Co., New York, N. Y.
Panjiris Weldment Co., St. Louis, Mo.
Peck, Cecil C. Co., Cleveland, Ohio
Vap-R-Flux Corp., Mansfield, Ohio

FLUXED WIRE SOLDER

Allen, L. B., Co., Chicago, Ill.
Alloy Ring Service, Inc., Indianapolis, Ind.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Alpha Metals, Inc., Brooklyn, N. Y.
Aluminum Co. of America, Pittsburgh, Pa.
American Brazing Alloys Co., Pelham, N. Y.
American Smelting & Refining Co., Fed. Metals Div., New York, N. Y.
American Welding Alloys, Inc., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Division Lead Co., Summit, Ill.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farreloy Co., Philadelphia, Pa.
Gases Agamex, S. A., Mexico
Kester Solder Co., Chicago, Ill.
Kirk, Morris P., & Son, Inc., Los Angeles, Calif.
National Lead Co., New York, N. Y.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Ruby Chemical Co., The, Columbus, Ohio
Swiss Laboratory, Cleveland, Ohio

FLUXES, Submerged Arc

American Manganese Steel Div., Chicago Heights, Ill.
Arcos Corp., Philadelphia, Pa.
Hobart Bros. Co., Troy, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Linde Co., New York, N. Y.
Sight-Feed Generator Co., West Alexandria, Ohio
Superweld Corp., N. Hollywood, Calif.

FLUX POTS

Boyd Welding Co., Erie, Pa.
Helmco, Inc., Chicago, Ill.

FLUX RECLAMATION and CRUSHING

(See also: "Submerged-Arc Flux Crusher")

Atlas Welding & Mfg. Co., Long Beach, Calif.
Holmes, Robert & Bros., Inc., Danville, Illinois
Invincible Vacuum Cleaner Mfg. Co., Dover, Ohio

FLUX RECOVERY EQUIPMENT

American Pulverizer Co., St. Louis, Mo.
American Vacuum Co., Skokie, Ill.
Farreloy Co., Philadelphia, Pa.
Hobart Bros. Co., Troy, Ohio
Holmes, Robt. & Bros., Inc., Danville, Ill.
Invincible Vacuum Cleaner Mfg. Co., Dover, Ohio
Kent Company, Inc., The, Rome, N. Y.
Peck, Cecil C., Co., Cleveland, Ohio
World Electric Co., Cleveland, Ohio

INVINCIBLE FLUX RECOVERY UNITS

Model 490—A compact machine for use with portable submerged arc welding equipment.

...the correct type for every submerged arc welding job

Hundreds of these Invincible units are saving money by efficiently salvaging unfused welding flux. They operate more rapidly and far better than any manual method. Also, by eliminating fine dust "flour" from the salvaged flux, they reduce welding rejects. Invincible Units are compact, easily installed and able to withstand continuous usage... Invincible's unequalled experience in this specialized field is at your service.

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INVINCIBLE VACUUM CLEANER MFG. CO
DOVER, OHIO.

FORGE WELDING COMPOUNDS

Allen, L. B., Co., Inc., Chicago, Ill.
Anti-Borax Compound Co., Inc., Fort Wayne, Ind.
Krembs & Co., Chicago, Ill.
Linde Co., New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Smith Welding Equip. Corp., Minneapolis, Minn.
Victor Equipment Co., San Francisco, Calif.

FORGES, Brazing, Saw

Champion Blower & Forge Co., Lancaster, Pa.
Buffalo Forge Co., Buffalo, N. Y.
Eclipse Fuel Engineering Co., Rockford, Ill.
Farrelloy Co., Philadelphia, Pa.
Johnson Gas Appliance Co., Cedar Rapids, Iowa

FORGES, Portable

Buffalo Forge Co., Buffalo, N. Y.
Champion Blower & Forge Co., Lancaster, Pa.
Eclipse Fuel Engineering Co., Rockford, Ill.
Johnson Gas Appliances Co., Cedar Rapids, Ia.
Hauck Mfg. Co., Brooklyn, N. Y.
Mahr Mfg. Co., Div. Diamond Iron Works, Inc., Minneapolis, Minn.

FUME COLLECTORS & REMOVERS

(See: "Ventilating Apparatus" and "Collectors, Blowers and Exhaust Systems")

FURNACES, Preheating, Annealing Stress-Relieving

(See also: "Brazing Furnaces")

Ajax Electric Co., Inc., Philadelphia, Pa.
Ajax Electrothermic Corp., Trenton, N. J.
Combustion Control Corp., Cambridge, Mass. (Stress-Relieving only)
Commerce Pattern Foundry & Machine Co., Detroit, Mich.
Continental Industrial Engineers' Co., Chicago, Ill.
Despatch Oven Co., Minneapolis, Minn.
Eclipse Fuel Engineering Co., Rockford, Ill.
Eisler Engineering Co., Inc., Newark, N. J.
Falcon Equipment Co., New Brighton, Pa.
Forney Mfg. Co., Fort Collins, Colo.
Gas Appliance Service, Inc., Chicago, Ill.
General Electric Co., Schenectady, N. Y.
Hayes, Inc., C. I., Cranston, R. I.
Hevi Duty Electric Co., Milwaukee, Wis.
Holcroft & Co., Detroit, Mich.
Hones, Chas. A., Inc., Baldwin, L. I., N. Y.
Induction Heating Corp., Brooklyn, N. Y.
Johnson Gas Appliance Co., Cedar Rapids, Iowa
Lepel High Frequency Lab., Inc., New York, N. Y.
Lindberg Engineering Co., Chicago, Ill.
Mahr Mfg. Co., Div. of Diamond Iron Works, Inc., Minneapolis, Minn.
Massillon Refractories Co., The, Massillon, Ohio
Metal Bond Mfg. Co., St. Louis, Mo.
Pacific Transducer Corp., Los Angeles, Calif.
Selas Corp. of America, Philadelphia, Pa.
Standard Research Inc., New Haven, Conn.
Surface Combustion Corp., Toledo, Ohio
Thermo Electric Mfg. Co., Dubuque, Iowa
Unique Mfg. Co., Inc., Chicago, Ill.
Vulcan Corp., Philadelphia, Pa.
Westinghouse Electric Corp., Pittsburgh, Pa.
Young Brothers Co., Cleveland, Ohio

GAGES, Oxygen & Acetylene

Acetogen Gas Co., Detroit, Mich.
Electric Auto-Lite Co., Toledo, Ohio
Elematic Equipment Corp., Chicago, Ill.
K-G Equipment Co., Allentown, Pa.
Linde Co., New York, N. Y.
Manning, Maxwell & Moore, Inc., Bridgeport, Conn.
Marsh, James P., Corp., Skokie, Ill.
Oxo Welding Equipment Co., New Lenox, Ill.
U. S. Gauge Co., Div. American Machine & Metals, Inc., Sellersville, Pa.
Witt Gauge Co., Div. of J. P. Marsh Corp., Skokie, Ill.

GALVANIZING COMPOUNDS

Allen, L. B. Co., Inc., Chicago, Ill.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Solder & Flux Co., Philadelphia, Pa.
Anchor Metal Co., Inc., Brooklyn, N. Y.
du Pont, E. I., de Nemours & Co., Inc., Wilmington, Dela.
Farreloy Co., Philadelphia, Pa.
Galv-Weld, Inc., Dayton, Ohio (Stick forms)
Johnson Mfg. Co., Inc., Mount Vernon, Iowa
Metalloy Products, Inc., Los Angeles, Calif.
Ohmer, George, Dayton, Ohio
Smith, G. W., & Sons, Inc., Dayton, Ohio

GAMMA-RAY EQUIPMENT

(See: "Inspection Equipment, Gamma-Ray" and "Radium Inspection")

GAS-BRAZING MACHINES

Eclipse Fuel Engineering Co., Rockford, Ill.
Eisler Engineering Co., Inc., Newark, N. J.
Gas Appliance Service, Inc., Chicago, Ill.
Gasflux Co., The, Elyria, Ohio
Modern Engineering Co., Inc., St. Louis, Mo.
Selas Corp. of America, Dresher, Pa.
Vap-R-Flux Corp., Mansfield, Ohio

GAS CUPS (For inert-gas welding)

Air Reduction Sales Co., New York, N. Y.
Ceramic Cups, Inc., New York, N. Y.
Diamonite Prod. Mfg. Co., Shreve, Ohio
Duramic Products, Inc., New York, N. Y.
K-G Equipment Co., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
National Cylinder Gas Div., Chicago, Ill.
National Technical Products, Inc., Englewood, N. J.
Tec Torch Co., Inc., Carlstadt, N. J.
Westinghouse Electric Corp., Buffalo, N. Y.

GAS EXHAUSTERS

Buffalo Forge Co., Buffalo, N. Y.
Chelsea Fan & Blower Co., Inc., Plainfield, N. J.
Clarage Fan Co., Kalamazoo, Mich.
Engwald Corp., Brooklyn, N. Y.
General Blower Co., Morton Grove, Ill.
Paasche Airbrush Co., Chicago, Ill.
Roots-Connersville Blower Corp., Connersville, Ind.
Sturtevant, B. F. Co., Boston, Mass.
Torit Mfg. Co., St. Paul, Minn.
Worthington Corp., Harrison, N. J.

GAS MASKS (For Welding)

Acme Protection Equipment Co., South Haven, Mich.
Nutt, Buell W. Co., Los Angeles, Calif.

GAS-WELDING MACHINES

American Oxygen Service Corp. Harrison, N. J.
Expert Welding Machine Co., Div. Expert Die & Tool Co., Detroit, Mich.
K-G Equipment Co., Inc., Allentown, Pa.
L & B Welding Equipment, Inc., Berkeley, Calif.
Sight Feed Generator Co., West Alexandria, Ohio
S-S Co., Brooklyn, N. Y.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio

GAS-WELDING TIPS

Acetogen Gas Co., Detroit, Mich.
Acetylene Supply Co., Linden, N. J.
Air Products, Inc., Allentown, Pa.
Air Reduction Sales Co., New York, N. Y.
American Oxygen Service Corp., Harrison, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Craftsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
General Welding & Equip. Co., Boston, Mass.
Goss Gas, Inc., Glenshaw, Pa.
Harris Calorific Co., The, Cleveland, Ohio
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Milburn, Alexander, Inc., Baltimore, Md.
Miles, John R. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
National Welding Equip. Co., San Francisco, Calif.
Oxo Welding Equipment Co., New Lenox, Ill.
S-S Co., Brooklyn, N. Y.
Smith Welding Equip. Corp., Minneapolis, Minn.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Universal Cutting & Welding Equip. Mfg. Co., Ft. Lauderdale, Fla.
Victor Equipment Co., San Francisco, Calif.
Welders Supply & Mfg. Co., The, Cincinnati, Ohio
Weldit, Inc., Detroit, Mich.

GAS-WELDING TORCHES

Acetylene Supply Co., Linden, N. J.
Air Products, Inc., Allentown, Pa.
Air Reduction Sales Co., New York, N. Y.
American Oxygen Service Corp., Harrison, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Craftsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Flint Products Corp., Brooklyn, N. Y.
General Welding & Equipment Co., Boston, Mass.
Goss Gas, Inc., Glenshaw, Pa.
Harris Calorific Co., The, Cleveland, Ohio
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metro Mfg. Co., Long Island City, N. Y.
Milburn, Alexander, Inc., Baltimore, Md.
Miles, John R. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
National Welding Equip. Co., San Francisco, Calif.
Smith Welding Equip. Corp., Minneapolis, Minn.
S-S Co., Brooklyn, N. Y.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Universal Cutting & Welding Equip. Mfg. Co., Ft. Lauderdale, Fla.
Victor Equipment Co., San Francisco, Calif.
Welders Supply & Mfg. Co., Cincinnati, Ohio
Weldit, Inc., Detroit, Mich.

GEARED HOISTS

Chester Hoist Div., National Screw & Mfg. Co., The, Lisbon, Ohio
Chisholm-Moore Hoist Corp., Tonawanda, N. Y.
Coffing Hoist Co., Danville, Ill.
Columbus-McKinnon Chain Corp., Tonawanda, N.Y.
Conco Engineering Works, Mendota,, Ill.
Harnischfeger Corp., Milwaukee, Wis.
Hewitt-Robins, Inc., Stamford, Conn.
Manning, Maxwell & Moore, Inc., Shaw-Box Crane and Hoist Division, Muskegon, Mich.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Northern Engineering Works, Detroit, Mich.
Philadelphia Chain Block & Mfg. Co., Inc., Philadelphia, Pa.
Reading Chain & Block Corp., Reading, Pa.
Robbins & Meyers, Inc., Springfield, Ohio
Round, David, and Son, Cleveland, Ohio
Sasgen Derrick Co., Chicago, Ill.
Stryco Mfg. Co., Francisco, Calif.
Whiting Corp., Harvey, Ill.
Wright Hoist Division of American Chain & Cable Co., Inc., York, Pa.
Yale & Towne Mfg. Co., The (Philadelphia Division), Philadelphia, Pa.

GEARED TROLLEY HOISTS

Chisholm-Moore Hoist Corp., Tonawanda, N. Y.
Cleveland Crane & Engineering Co., Wickliffe, Ohio
Coffing Hoist Co., Danville, Ill.
Columbus-McKinnon Chain Corp., Tonawanda, N. Y.
Conco Engineering Works, Mendota, Ill.
Detroit, Hoist & Machine Co., Detroit, Mich.
Ford Chain Block Division of American Chain & Cable Co., Inc., York, Pa.
Harnischfeger Corp., Milwaukee, Wis.
Industrial Equipment Co., Chicago, Ill.
Ingersoll-Rand Co., New York, N. Y.
Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Div., Muskegon, Mich.
Master Electraic Co., The, Dayton, Ohio
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Northern Engineering Works, Detroit, Mich.
Philadelphia Chain Block & Mfg. Co., Inc., Philadephia, Pa.
Robbins & Meyers, Inc., Springfield, Ohio
Round, David, and Son, Cleveland, Ohio
Stryco Mfg. Co., San Francisco, Calif.
Wright Hoist Division of American Chain & Cable Co., Inc., York, Pa.
Yale & Towne Mfg. Co., The (Philadelphia Division), Philadelphia, Pa.

GLASS LENSES

American Industrial Safety Equipment Co., Inc., Cleveland, Ohio
American Optical Co., Southbridge, Mass.
Bache, Semon & Co., New York, N. Y.
Bausch & Lomb Optical Co., Rochester, N. Y.
Bullock, L. H., Co., Richmond, Calif.
Burdett Oxygen Co., Cleveland, Ohio
Dockson Corp., Detroit, Mich.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
Glendale Optical Co., Inc., Valley Stream, N. Y.
General Scientific Equipment Co., Philadelphia, Pa.
Industrial Products Co., Philadelphia, Pa.
Jackson Products, Inc., Warren, Mich.
Kedman Co., Salt Lake City, Utah
Kimball Safety Prod. Co., Cleveland, Ohio
Linde Co., New York, N. Y.
Magna Industrial Lens Co., Holdenville, Okla.

NCG* WELDING and CUTTING APPARATUS

WELDING TORCHES

In Torchweld® and Rego* lines, a broad range of welding torches, cutting attachments and tips to meet every need. Superior in stamina, speed and safety.

CUTTING TORCHES

Outstanding in field are Torchweld 75 and Rego KX cutting torches. Broad range of tips for cutting steel up to 20 in. thick. Famous for long life and dependability.

REGULATORS

Two outstanding lines of single-stage and two-stage types for all types of gases used in welding and cutting.

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Mine Safety Appliances Co., Pittsburgh, Pa.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Oxo Welding Equipment Co., New Lenox, Ill.
Pulmosan Safety Equip. Corp., Brooklyn, N. Y.
Safety Clothing & Equip. Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Sellstrom Mfg. Co., Palatine, Ill.
Thermacote Co., Pasadena, Calif.
United States Safety Service Co., Kansas City, Mo.
Welding Alloys Mfg. Co., Newark, N. J.
Wilkie Optical, Inc., Barrington, N. J.
Willson Products, Inc., Reading, Pa.

GLOVES, Asbestos, Heat and Flame-Resistant Duck, Leather

A & A Mfg. Co., Milwaukee, Wis.
Advance Glove Mfg. Co., Detroit, Mich.
Aljay Mfg. Co., Inc., Philadelphia, Pa.
American Industrial Safety Equipment Co., Cleveland, Ohio
American Optical Co., Southbridge, Mass.
Boss Mfg. Co., Kewanee, Ill.
Boyer-Campbell Co., Detroit, Mich.
Burdett Oxygen Co., Cleveland, Ohio
Eastern Equipment Co. Inc. Willow Grove, Pa.
Elliott Glove Co., Inc., Oconto, Wis.
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
General Scientific Equip. Co., Philadelphia, Pa.
General Split Corp., Milwaukee, Wis.
Genter, C. D., Co., Chattanooga, Tenn.
Greene, Tweed & Co., North Wales, Pa.
Hammond Associates, Inc., New York, N. Y.
Hanover Glove Co., Inc., Hanover, Pa.
Holcomb Safety Garments Co., Chicago, Ill.
Imperial Glove Mfg. Co., Berlin, Wis.
Industrial Gloves Co., Danville, Ill.
Industrial Products Co., Philadelphia, Pa.
Janos Asbestos Co., New York, N. Y.
Johns-Manville, New York, N. Y.
Kimball Safety Prod. Co., Cleveland, Ohio
Kirschner Gloves, Inc., Oconto, Wis.
Kriewalt Specialty Mfg. Co., Oconto, Wis.
Linde Co., New York, N. Y.
Milburn Co., Detroit, Mich.
Mine Safety Appliances Co., Pittsburgh, Pa.
Montpelier Glove Co., Montpelier, Ind.
National Cylinder Gas Div., Chicago, Ill.
Nutt, Buell W. Co., Los Angeles, Calif.
Olympic Glove Co., Inc., New York, N. Y.
Perfect Glove Co., Inc., Milwaukee, Wis.
Pulmosan Safety Equip. Co., Brooklyn, N. Y.
Racine Glove Co., Inc., Rio, Wis.
Riegel Textile Corp., Conover, N. C.
Safety Clothing & Equip. Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Singer Glove Mfg. Co., Chicago, Ill.
Standard Safety Equipment Co., Chicago, Ill.
Streichert, E. J., Chicago, Ill.
Tillman, John, & Co., Long Beach, Calif.
Twentieth Century Glove Corp. of Texas, Atlanta, Texas
Universal Leather Co., Berlin, Wis.
Wheeler Protective Apparel, Inc., Chicago, Ill.
Wickman Glove Co., Berkeley, Calif.

GOGGLE CLEANERS

American Optical Co., Southbridge, Mass.
Boyer-Campbell Co., The, Detroit, Mich.
Dow Chemical Co., Midland, Mich.
General Scientific Equip. Co., Philadelphia, Pa.
Mine Safety Appliances Co., Pittsburgh, Pa.
Oakite Prod. Inc., New York, N. Y.
Pulmosan Safety Equip. Corp., Brooklyn, N. Y.
Safety Clothing & Equip. Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
United States Safety Service Co., Kansas City, Mo.
Welkins Co., Inc., Cortland, N. Y.
Wilkie Optical, Inc., Barrington, N. J.

GOGGLE and HELMET LENSES

American Industrial Safety Equipment Co., Cleveland, Ohio
American Optical Co., Southbridge, Mass.
Bache, Semon & Co., New York, N. Y.
Bausch & Lomb Optical Co., Rochester, N. Y.
Bullard, E. D., Co., San Francisco, Calif.
Bullock, L. H., Co., Richmond, Calif.
Burdett Oxygen Co., Cleveland, Ohio
Chicago Eye Shield Co., Chicago, Ill.
Culver Glass Specialties, Inc., New York, N. Y.
Dockson Corp., Detroit, Mich.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
General Scientific Equip. Co., Philadelphia, Pa.
Glendale Optical Co., Inc., Valley Stream, N. Y.
Homalite Corp., The, Wilmington, Del.
Industrial Products Co., Philadelphia, Pa.
Jackson Products, Inc., Warren, Mich.
Kimball Safety Prod. Co., Cleveland, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Linde Co., New York, N. Y.
Magna Industrial Lens Co., Holdenville, Okla.
Metro Mfg. Co., L. I. City, N. Y.
Mine Safety Appliances Co., Pittsburgh, Pa.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
Olympic Glove Co., Inc., The, New York, N. Y.
Oxo Welding Equipment Co., New Lenox, Ill.
Pulmosan Safety Equip. Co., Brooklyn, N. Y.
Safety Clothing & Equip. Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Sellstrom Mfg. Co., Palantine, Ill.
Thermacote Co., Pasadena, Calif.
United State Safety Service Co., Kansas City, Mo.
Univis Lens Co., The, Dayton, Ohio
Wallace Optical Co., Detroit, Mich.
Whatchmaket Optical Co., Inc., Proividence, R. I.
Welding Alloys Mfg. Co., Newark, N. J.
Welsh Mfg. Co., Providence, R. I.
Willson Products, Inc., Reading, Pa.
Wooldridge Aluminum Welding Prod., Malden, Mass.

GOGGLE and HELMET LENSES, Magnifying

Magna Industrial Lens Co., Holdenville, Okla.
Metro Mfg. Co., Long Island City, N. Y.

GOGGLES, Chippers', Cover, Spectacle Type with Side Shield, and Welding

American Allsafe Co., Inc., Buffalo, N. Y.
American Industrial Safety Equipment Co., Cleveland, Ohio
American Optical Co., Southbridge, Mass.
Bausch & Lomb Optical Co., Rochester, N. Y.
H. L. Bouton Co., Buzzards Bay, Mass.
Boyer-Campbell Co., The, Detroit, Mich.
Bullock, L. H., Co., Richmond, Calif.
Burdett Oxygen Co., Cleveland, Ohio
Central Steel & Wire Co., Chicago, Ill.
Chicago Eye Shield Co., Chicago, Ill.
Davis Emergency Equip. Co., Inc., Newark, N. J.
Dockson Corp., Detroit, Mich.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Eastern Safety Equipment Co., New York, N. Y.
Electric Eye Equipment Co., Danville, Ill.
Fibre Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
General Scientific Equip. Co., Philadelphia, Pa.
Glendale Optical Co., Inc., Valley Stream, N. Y.
Goggle Parts Co., Cleveland, Ohio
Industrial Products Co., Philadelphia, Pa.

(More goggle listings on page 49.)

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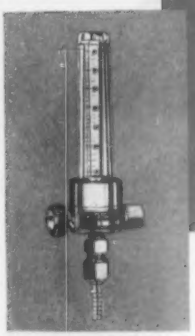
the K-G equipment company, inc.
an Air Products subsidiary Allentown, Pa.
quality welding and cutting equipment since 1914



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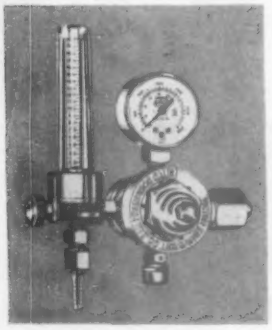
VICTROMETER

give you precise control and measurement of gases

Victor regulators and flowmeters provide accurate, safe control and measurement of gases used in industrial applications, such as welding and cutting; gas shielded arc welding; laboratory work; atmosphere control; furnace operations, etc. For use with oxygen, air, argon, helium, nitrogen, hydrogen, carbon dioxide, and other gases.



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- **FEATURES:** Construction—compact, sturdy design provides adequate capacity with minimum weight and size.
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- **VICTOR TWO-STAGE REGULATORS** are recommended for operations requiring constant delivery pressure over a range of varying inlet pressures.
- **INDUSTRIAL VICTROMETERS** provide reliable, efficient measurement of gas flow. Gauge is visible from all sides. Tubes and floats can be easily changed or adjusted for different gases and flow rates.
- **REGULATOR-VICTROMETER COMBINATIONS**—Single or two-stage regulators may be combined with Victrometers making a compact unit that both regulates and measures gas flow.

Specify Victor for your job. See your Victor dealer or write us.

VICTOR
for regulators
and flowmeters

VICTOR EQUIPMENT COMPANY 59

Mfrs. of high pressure and large volume gas regulators; welding & cutting equipment; hardfacing rods; blasting nozzles; cobalt & tungsten castings; straight-line and shape cutting machines.

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J. C. Menzies & Co., Wholly-Owned Subsidiary

SUPERGOGGLES, series 70

New Gas Welding and Grinding Goggles made roomier for comfort and good fit, even over the largest spectacles. With elastic headband (shown) or with plastic headgear, telescopic arms.

Jackson Products

WARREN • MICHIGAN

GOGGLES, Chippers', Cover, Spectacle Type with Side Shield, and Welding

Jackson Products, Inc., Warren, Mich.
Kimball Safety Prod. Co., Cleveland, Ohio
Linde Co., New York, N. Y.
Metro Mfg. Co., L. I. City, N. Y.
Mine Safety Appliances Co., Pittsburgh, Pa.
Modern Engineering Co., Inc., St. Louis, Mo.
Olympic Glove Co., Inc., New York, N. Y.
Parker Safety Equip. Corp., Irvington, N. J.
Pulmosan Safety Equip. Corp., Brooklyn, N. Y.
Safety Clothing & Equip. Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Sellstrom Mfg. Co., Palatine, Ill.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Thermacote Co., Pasadena, Calif.
United States Safety Service Co., Kansas City, Mo.
Universal Power Corp., Cleveland, Ohio
Univis Lens Co., The, Dayton, Ohio
Wallace Optical Co., Inc., Detroit, Mich.
Watchemoket Optical Co., Inc., Providence, R. I.
Welding Alloys Mfg. Co., Newark, N. J.
Welsh Mfg. Co., Providence, R. I.
Willson Products, Inc., Reading, Pa.
Wilkie Optical, Inc., Barrington, N. J.

GOUGERS, Carbon Arc

(See also "Arc-Air" and "Arc-Oxygen Cutting Apparatus" and "Cutting Electrodes")

Arcair Co., Lancaster, Ohio

GOVERNORS, Gas Engine

Electric Arc, Inc., Newark, N. J.
Hobart Bros. Co., Troy, Ohio
Hoof Products Co., Chicago, Ill.
Lincoln Electric Co., The, Cleveland, Ohio
Pierce Governor Co., Inc., The, Anderson, Ind.

GRINDERS, Bench and Floor

Albertson & Co., Sioux City, Iowa
Aro Equipment Corp., The, Bryan, Ohio
Atlas Press Co., Kalamazoo, Mich.
Baldor Electric Co., St. Louis, Mo.
Balmar, Franklin, Corp., Baltimore, Md.
Black & Decker Mfg. Co., The, Towson, Md.
Blackford Mfg. Co., Inc., Hartford City, Ind.
Bradford Machine Tool Co., The, Cincinnati, Ohio
Champion Blower and Forge Co., Lancaster, Pa.
Cincinnati Electrical Tool Co., The, Cincinnati, Ohio
Clark, James, Jr., Electric Co., Louisville, Ky.
Cutter Machine Co., St. Louis, Mo. (Floor only)
Do-All Co., The, Des Plaines, Ill.
Foley Mfg. Co., Minneapolis, Minn.
Hammond Machinery Builders, Inc., Kalamazoo, Mich.
Hisey-Wolf Mach. Co., The, Cincinnati, Ohio
Hoof Products Co., Chicago, Ill.
Kling Bros. Engineering Works, Chicago, Ill.
Master Electric Co., The, Dayton, Ohio
Millers Falls Co., Inc., Greenfield, Mass.
Misener Mfg. Co., Inc., Syracuse, N. Y.
Nu-Matic Grinders, Inc., Cleveland, Ohio
Peterson Welding Laboratories, Kansas City, Mo.
Porter-Cable Mach. Co., Syracuse, N. Y.
Ryman Engineering Co., Inc., Ellwood City, Pa.
Skil Corp., Chicago, Ill.
Speedway Mfg. Co., Cicero, Ill.
Standard Electrical Tool Co., The, Cincinnati, Ohio
Stanley Electric Tools, New Britain, Conn.
Stow Manufacturing Co., Inc., Binghamton, N. Y.
Thor Power Tool Co., Chicago, Ill.
United States Electrical Tool Co., The, Cincinnati, Ohio
Valley Electric Corp., St. Louis, Mo.

GRINDERS, Electric Portable

Albertson & Co., Inc., Sioux City, Iowa
Baldor Electric Co., St. Louis, Mo.
Balmar, Franklin, Corp., Baltimore, Md.
Belmont Abrasives, Boston, Mass.
Black & Decker Mfg. Co., The, Towson, Md.
Buckeye Tools Corp., Dayton, Ohio
Chicago Pneumatic Tool Co., New York, N. Y.
Chicago Wheel & Mfg. Co., Chicago, Ill.
Cincinnati Electrical Tool Co., The, Cincinnati, Ohio
Dremel Manufacturing Co., Racine, Wis.
Elliott Mfg. Co., Binghamton, N. Y.
Erico Products Inc., Cleveland, Ohio
Haskins, R. G., Co., Chicago, Ill.
Hisey-Wolf Machine Co., Cincinnati, Ohio
Lee, K. O., Co., Aberdeen, S. D.
Master Pneumatic Tool Co., Inc., Orwell, Ohio
McGonegal Manufacturing Co., The, East Rutherford, N. J.
Miller Falls Co., Greenfield, Mass.
Milwaukee Electric Tool Corp., Milwaukee, Wis.
The Nedco Co., Waltham, Mass.
Nu-Matic Grinders, Inc., Cleveland, Ohio
Portable Electric Tools, Inc., Chicago, Ill.
Porter-Cable Mfg. Co., Syracuse, N. Y.
Rotor Tool Co., Cleveland, Ohio
Skil Corp., Chicago, Ill.
Speedway Mfg. Co., Cicero, Ill.
Stanley Electric Tools, New Britain, Conn.
Stow Manufacturing Co., Inc., Binghamton, N. Y.
Thor Power Tool Co., Chicago, Ill.
United States Electrical Tool Co., The, Cincinnati, Ohio
Wodack Electric Tool Corp., Chicago, Ill.
Wyzenbeek & Staff, Inc., Chicago, Ill.

GRINDERS, Flexible Shaft

Albertson & Co., Sioux City, Iowa
Balmar, Franklin, Corp., Baltimore, Md.
Bradford Machine Tool Co., The, Cincinnati, Ohio
Duro Metal Products Co., Chicago, Ill.
Elliott Mfg. Co., Binghamton, N. Y.
Haskins, R. G. Co., Chicago, Ill.
Master Electric Co., The, Dayton, Ohio
Master Vibrator Co., Dayton, Ohio
Nu-Matic Grinders, Inc., Cleveland, Ohio
Stow Mfg. Co., Inc., Binghamton, N. Y.
Swartz & White Mfg. Co., Binghamton Flexible Shaft Division, Binghamton, N. Y.
United States Electrical Tool Co., The, Cincinnati, Ohio
Wyzenbeek & Satff, Inc., Chicago, Ill.

GRINDERS, Pneumatic, Portable

Aro Equipment Corp., The, Bryan, Ohio
Bellows Co., The, Akron, Ohio
Buckeye Tools Corp., Dayton, Ohio
Chicago Pneumatic Tool Co., New York, N. Y.
Cleco Div., Reed Roller Bit Co., Houston, Texas
Gardner-Denver Co., Quincy, Ill.
Independent Pneumatic Tool Co., Aurora, Ill.
Ingersoll-Rand Co., New York, N. Y.
Keller Tool Co., Grand Haven, Mich.
M-B Products, Detroit, Mich.
Master Pneumatic Tool Co., Inc., Orwell, Ohio
Nu-Matic Grinders, Inc., Cleveland, Ohio
Robertson Mfg. Co., Morrisville, Pa.
Rotor Tool Co., Cleveland, Ohio
Ryman Engineering Co., Ellwood City, Pa.
Sheldon Machine Co., Chicago, Ill.
Thor Power Tool Co., Chicago, Ill.

GRINDING WHEEL DRESSERS

Black & Decker Mfg. Co., The, Towson, Md.
Calder Mfg. Co., Lancaster, Pa.
Desmond-Stephan Mfg. Co., Urbana, Ohio
DoAll Co., The, Des Plaines, Ill.
Lee, K. O. Co., Aberdeen, S. D.
Macklin Co., Jackson, Mich.
Pratt & Whitney Div., Niles-Bement-Pond Co., West Hartford, Conn.
Standard Elec. Tool Co., The, Cincinnati, Ohio
Standard Tool Co., Cleveland, Ohio
Vincent Steel Process Co., Detroit, Mich.
Willey's Carbide Tool Co., Detroit, Mich.
Wisconsin Abrasive Co., Milwaukee, Wis.

GRINDING WHEELS

Atlantic Abrasive Corp., S. Braintree, Mass.
Bay State Abrasive Products Co., Westboro, Mass.
Bridgeport Safety Emery Wheel Co., Inc., The, Bridgeport, Conn.
The Carborundum Co., Niagara Falls, N. Y.
Chicago Wheel & Mfg. Co., Chicago, Ill.
Cincinnati Milling Machine Co., Grinding Wheels Div., Cincinnati 9, Ohio
Colonial Abrasive Products Co., Conshohocken, Pa.
Cortland Grinding Wheels Corp., Chester, Mass.
de Sanno, A. P., & Son, Inc., Phoenixville, Pa.
DoAll Co., The, Des Plaines, Ill.
Hoffman, R. W., Co., Inc., Chicago, Ill.
Macklin Co., Jackson, Mich.
Metal Removal Co., Chicago, Ill.
Mid-West Abrasive Co., Owosso, Mich.
Norton Co., Worcester, Mass.
Peninsular Grinding Wheel Co., The, Detroit, Mich.

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ECONOMY

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GROUND CLAMPS

- Spring cannot be knocked out.
- Spring adjustment screw for easy replacement or adjusting.
- Sturdily built for excessive abuse.
- Designed especially for all-around welders needs.

LENCO, INC.

Box 189, Jackson, Mo.

Precision Grinding Wheel Co., Inc., Philadelphia, Pa.
Raybestos-Manhattan, Inc., Passaic, N. J.
Robertson Mfg. Co., Morrisville, Pa.
Sandusky Abrasive Wheel Co., Kalamazoo, Mich.
Simonds Abrasive Co., Philadelphia, Pa.
Simonds Worden White Co., Dayton, Ohio
Sterling Grinding Wheel Div., of the Cleveland Quarries Co., Tiffin, Ohio
Thermacote Co., Pasadena, Calif.
Universal Wheel & Abrasive Corp., Chicago, Ill.
Weldon Roberts Rubber Co., Newark, N. J.
Wisconsin Abrasive Co., Milwaukee, Wis.

GROUND CLAMPS

Adjustable Clamp Co., Chicago, Ill.
Albert & J. M. Anderson Mfg. Co., S. Boston, Mass.
Cam-Lok Div., Empire Prod., Inc., Cincinnati, Ohio
Erico Products, Inc., Cleveland, Ohio
Flood Safety Products Co., Chicago, Ill.
Forney Mfg. Co., Fort Collins, Colo.
Hobart Bros. Co., Troy, Ohio
Har-Worth Mfg. Co., Newark, N. J.
Jackson Products, Inc., Warren, Mich.
Lenco, Inc., Jackson, Mo.

(More ground clamp listings on page 50.)

JACKSON

GROUND CLAMPS

Quality products, part of a group including Ground Clamps, Cable Connectors, Splicers and Lugs, all available in sizes No. 1, 2/0, and 4/0. Made by the makers of the popular quality line of Arc Welding Electrode Holders.

Jackson Products

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TWECO GROUND CLAMPS

TWECO GROUND CLAMPS
Made in 200 Amp. Cub, 300 Amp. Junior and 500 Amp. Senior Sizes. High conductivity Copper. Both Jaws Carry Current. Easy to attach—Easy to Use.

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Write for New Tweceleg covering complete line of Arc Welding Accessories.

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WICHITA 1, KANSAS

GROUND CLAMPS

Lincoln Electric Co., The, Cleveland, Ohio
Mueller Elec. Co., Cleveland, Ohio
Pike Products, Inc., Jackson, Mo.
Tweco Products, Inc., Wichita, Kans.
Universal Welder Corp., Cleveland, Ohio
Wagner, H. J., Products, Inc., Jackson, Me.
Will-Weld Mfg. Co., Omaha, Nebraska

GRIT-BLASTING EQUIPMENT

Brennan, Bucci & Weber, Inc., New York, N. Y.
Clementina Ltd., San Francisco, Calif.
Metallizing Co., of America, Inc., Chicago, Ill.
Metallizing Engineering Co., Inc., Long Island City, N. Y.
Persons Engr. Corp., Cleveland, Ohio
Ruemelin Mfg. Co., Milwaukee, Wis.
Vacu-Blast Co., Inc., Belmont, Calif.
Wheelabrator Corp., Mishawaka, Ind.

GUN RESISTANCE WELDERS

Acme Electric Welder Co., Los Angeles, Calif.
Acro Welder Mfg. Co., Milwaukee, Wis.
Allied Welder Corp., Dearborn, Mich.
Alphil Spot Welder Mfg. Co., Brooklyn, N. Y.
Ames Spot Welder Co., Inc., Brooklyn, N. Y.
Aro Spot Welders, Long Island City, N. Y.
Banner Welder, Inc., Milwaukee, Wis.
Delta Welder Corp., Detroit, Mich.
Eisler Engineering Co., Inc., Newark, N. J.
Federal Machine & Welder Co., The, Warren, Ohio
Federal Tool Engineering Co., Cedar Grove, N. J.
Goodrich Welding Equip. Corp., Hudsonville, Mich.
Hoffman, Robt. W. Co., Inc., Chicago, Ill.
Larkin Welder & Machine Corp., Brooklyn, N. Y.
Link Welder Corp., Detroit, Mich.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Multi-Hydromatic Welding & Mfg. Co., East Detroit, Mich.
National Electric Welding Machine Co., Bay City, Mich.
Peer, Inc., Benton Harbor, Mich.
Precision Welder & Flexopress Corp., Cincinnati, Ohio
Progressive Welder Sales Co., Detroit, Mich.
Raytheon Mfg. Co., Waltham, Mass.
Resistance Welder Corp., Detroit, Mich.
Sciaky Bros., Inc., Chicago, Ill.
Stryco Mfg. Co., San Francisco, Calif.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Universal Electric Sales Corp., Cleveland, Ohio
Vacuum Tube Products Co., Oceanside, Calif.
Weldex, Inc., Detroit, Mich.

HACK SAW MACHINES

Armstrong-Blum Mfg. Co., Chicago, Ill.
Champion Blower & Forge Co., Lancaster, Pa.
Chicago Pneumatic Tool Co., New York, N. Y.
Mid-States Welder Mfg. Co., Chicago, Ill.
Peerless Machine Co., Racine, Wis.
Racine Tool & Machine Co., Racine, Wis.
Sales Service Machine Tool Co., St. Paul, Minn.
Skil Corp., Chicago, Ill.
Syntron Co., Homer City, Pa.
Thor Power Tool Co., Chicago, Ill.
Wells Manufacturing Corp., Three Rivers, Mich.
Wyzenbeek & Staff, Inc., Chicago, Ill.

HACK SAWS (Hand Blades)

American Saw & Mfg. Co., Springfield, Mass.
Armstrong-Blum Mfg. Co., Chicago, Ill.
Atkins, E. C. and Co., Indianapolis, Ind.
Barnes, W. O., Co., Inc., Detroit, Mich.

ALLOY RODS CO.

HARD SURFACING ALLOYS

WEAR-ARC ELECTRODES FOR MANUAL HARD SURFACING APPLICATIONS

Wear-Arc 3 Iron Powder—Build-up alloy for carbon steel. Machinable.

Wear-Arc 4 Iron Powder—Non-machinable alloy for carbon steel.

Wear-Arc 5 Iron Powder—Hard surfacing alloy for resistance to abrasion, impact.

Wear-Arc 6 Iron Powder—Hard surfacing alloy—abrasion and moderate impact.

Wear-Arc 12 Iron Powder—Hard surfacing alloy—heavy impact and abrasion.

Wear-Arc WH—Build-up alloy for carbon and manganese steel parts.

Wear-Arc Super WH—Hard surfacing alloy—severe impact, abrasion, compression on manganese and carbon steel parts.

Wear-Arc Nickel-Manganese—for attachment welding or build-up overlays on manganese steel.

Wear-Arc Chrome-Boride—Hard surfacing alloy for severe abrasion.

Wear-Arc and Wear Flame A or B—Hard surfacing alloy—corrosion, heat, abrasive wear.

Wear-Arc and Wear-Flame 40—Hard surfacing alloy—medium impact, high abrasion.

Wear-Arc Tungsten Carbide.

WEAR-O-MATIC SEMI-AUTOMATIC HARD SURFACING PROCESS

The Wear-O-Matic Wire Feed Unit combined with Wear-O-Matic Hard Surfacing Wires packaged in convenient WELD-PAKS offers superior hard surfacing semi-automatically at a very low initial cost. Faster welding speeds, one man portability, and the superior quality of Wear-O-Matic deposits make the Wear-O-Matic process outstanding for economic longer wearing deposits.

For complete information see your Alloy Rods Company representative or write for Bulletin HS-1.

ALLOY RODS COMPANY
YORK 6, PENNSYLVANIA

Belmont Abrasives, Boston, Mass.
Blackhawk Mfg. Co., Milwaukee, Wis.
Bonny Forge & Tool Works, Allentown, Pa.
Capewell Mfg. Co., The, Hartford, Conn.
Clemson Bros., Middletown, N. Y.
Crescent Tool Co., Jamestown, N. Y.
Disston, Div., H. K. Porter Co., Inc., Philadelphia, Pa.
DoAll Co., The, Des Plaines, Ill.
Forsberg Mfg. Co., The, Bridgeport, Conn.
Griffin, G. W., Co., Franklin, N. H.
Heller Tool Co., Newcomerstown, Ohio
Ladish Co., Cudahy, Wis.
Owatonna Tool Co., Los Angeles, Calif.
Racine Tool & Machine Co., Racine, Wis.
Simonds Saw and Steel Co., Fitchburg, Mass.
Spartan Saw Works, Inc., Springfield, Mass.
Starrett, L. S., Co., The, Athol, Mass.
Thompson, Henry G. & Son, Co., The, New Haven, Conn.
Victor Saw Works, Inc., Middletown, N. Y.

HAND PUNCHES

Billings and Spencer Co., Hartford, Conn.
Blackhawk Mfg. Co., Milwaukee, Wis.
Bonny Forge & Tool Works, Allentown, Pa.
Buffalo Forge Co., Buffalo, N. Y.
C-B Tool Co., Lancaster, Pa.
Cincinnati Tool Co., The, Cincinnati, Ohio
Crescent Tool Co., Jamestown, N. Y.
Greenlee Tool Co., Rockford, Ill.
Herbrand Tools, Fremont, Ohio
Kraeuter & Co., Inc., Newark, N. J.
Lapeer Mfg. Co., Detroit, Mich.
Mayhew Steel Products, Inc., Shelburne Falls, Mass.
National Machine Tool Co., Racine, Wis.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil Irwin Mfg. Co., Lake City, Minn.
Owatonna Tool Co., Owatonna, Minn.
Oxford Tool Corp., Philadelphia, Pa.
Parker-Kalon Corp., New York, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Plomb Tool Co., Los Angeles, Calif.
Quality Tools Corp., New Wilmington, Pa.
Whitney, W. A., Mfg. Co., Rockford, Ill.
Williams, J. H., & Co., Buffalo, N. Y.

HANDLES—Adze, Axe, Hammer & Hatchet, Etc.

American Handle Co., Jonesboro, Ark.
Bonny-Forge & Tool Works, Allentown, Pa.
Bruner-Ivory Handle Co., Hope, Ark.
Herbrand Tools, Fremont, Ohio
Link, O. P., Handle Co., Salem, Ind.
Lutz File & Tool Co., Cincinnati, Ohio
Plomb Tool Co., Los Angeles, Calif.
Plumb, Fayette R., Inc., Philadelphia, Pa.

HANDLES—File, Chisel, Punch, Etc.

American Stamping Co., Battle Creek, Mich.
Atlas Welding Accessories Co., Ferndale, Mich.
Bonney Forge & Tool Works, Allentown, Pa.
Disston, Div., H. K. Porter Co., Inc., Philadelphia, Pa.
Link, O. P., Handle Co., Salem, Ind.
Lutz File & Tool Co., Cincinnati, Ohio
Nicholson File Co., Providence, R. I.
Parker-Kalon Corp., New York, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Plomb Tool Co., Los Angeles Calif.
Plumb, Inc., Fayette R., Philadelphia, Pa.
Quality Tool Corp., New Wilmington, Pa.
Simonds Saw & Steel Co., Fitchburg, Mass.
Syracuse Alloy Metals Corp., Syracuse, N. Y.
Wolverine Tool Co., Detroit, Mich.

HARDFACING ELECTRODES

Air Reduction Sales Co., New York, N. Y.
Allied Weldcraft, Inc., Indianapolis, Ind.
Alloy Rods Co., York, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
American Manganese Steel Co., Chicago Heights, Ill.
Ampco Metals Inc., Milwaukee, Wis.
Champion Rivet Co., Cleveland, Ohio
Chicago Hardware Foundry Co., N. Chicago, Ill.
Coast Metals, Inc., Little Ferry, N. J.
Crobalt, Inc., Ann Arbor, Mich.
Crucible Steel Co. of America, Pittsburgh, Pa.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Gases Agamex, S. A., Mexico
General Electric Co., Schenectady, N. Y.
Harnischfeger Corp., Milwaukee, Wis.
Haynes Stellite Co., Kokomo, Ind.
Hobart Bros. Co., Troy, Ohio
Industrial Overlay Metals, Eaton, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
McDonald, E. J., Co., Reno, Nev.
McKay Co., Pittsburgh, Pa.
Metal & Thermit Corp., Rahway, N. J.
Mir-O-Col Alloy Co., Inc., Los Angeles, Calif.
National Cylinder Gas Div., Chicago, Ill.
Page Steel & Wire Div., Amer. Chain & Cable Co., Inc., Monessen, Pa.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Phillips, C. E., & Co., Detroit, Mich.

What's proper Victor alloy for your

HARDFACING NEEDS?

This chart gives you quick answer. Use it to select right rods for prolonging operating life of your equipment. You'll be selecting rods that go on quickly and smoothly, thereby saving labor and downtime. Order from your Victor dealer today.

FREE For more detailed information on how to apply Victor hardfacing alloys to wearing parts, write us NOW for your copy of Victor Hardfacing Manual.

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Alloy Rod & Metal Division

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H-60

RODS FOR MANUAL APPLICATION

This Hardfacing Rod	For These Conditions	This Equipment or use	How Applied
VICTORTUBE (Tungsten Carbide)	Severest abrasion	Earth cutting, scraping, drilling tools, rippers, augers, ditchers, excavators, loaders	Gas AC-DC Arc
VICTORTUBE (TC) Bare 30-Down	Severest abrasion; moderate impact	Agricultural and earthworking tools. Suitable for acetylene application	Gas only
VICTORTUBE "SPECIAL" (Tungsten Carbide)	Severe abrasion with impact	Oil field tools - rock bits, drag bits, reamers; water well drilling tools	Gas only
VICTOR TUNGSMOOTH (Tungsten Carbide)	Maximum abrasion	Edged cutting tools - bits, blades, farm tools. Smooth, thin deposits on augers, screw flights, paddles.	Gas AC-DC Arc
VICTORITE	High abrasion; sliding friction	Earthmoving and agricultural tools, brick augers, conveyors, mill guides	Gas AC-DC Arc
TUBE VICTORITE	Abrasion and impact	Farm tools, crushers, grinders, mixers, scrapers, fan and screw conveyors	Gas AC-DC Arc
VICTORITE 1	Heat; abrasion, corrosion	Chemical & food machinery, cement pumps, brick dies, dry bearings & journals, expellers	Gas AC-DC Arc
VICTORITE 6	Heat; impact; corrosion; abrasion	Hot dies, stripper bits, exhaust valves & seats, dry bearings & journals, edging rolls, cams	Gas AC-DC Arc
VICTORITE 12	Heat; corrosion; abrasion; impact	Saw-blade inserts, shaft bearings, hot punches, flapper valves, needle valves	Gas AC-DC Arc
VICTORITE CARBON ARC	High abrasion; sliding friction	Farm tools, earth abrasion. Applied by gas. Deposits are exceptionally smooth.	Carbon Arc Gas
VICTORITE Plow Point Bar	High abrasion; sliding friction	Cast-to-shape, weld-on cutting edge for plow shares, digger teeth, pilot bits	Gas
VICTORALLOY	Severe impact; abrasion	Crusher & dredge parts, tamper feet, bucket teeth. A tough low-cost hardfacing.	Gas AC-DC Arc
VICTORALLOY #1	High abrasion; medium impact	Crushers, bucket lips & teeth, muller tires, dozer blades, dredge pumps	Gas AC-DC Arc
VICTORALLOY "A"	Angular shock; extreme impact	Clutch parts, gears, latches, pins & keepers; build-up for hardfacing	AC-DC Arc only
VICTORALLOY "B"	Heavy impact; moderate abrasion	Tractor idlers, sprockets, rolls, crusher parts, pump casings, impellers, liners	AC-DC Arc only
VICTORALLOY "C"	High abrasion; moderate impact	Cement screws, gudgeons, drag chains, pressure rolls, mixer blades & paddles	AC-DC Arc only
VICTOR MULTI-PASS (for Build-Up)	Severe impact; compression	Drill tools, crawler pads, crushers, mine rails; build-up for hardfacing	AC-DC Arc only
VICTOR Ni-Mn (for Build-Up)	Severe impact; compression	Hardmetal underbase for manganese steel parts on crushers, dredges, dippers	AC-DC Arc only
VICTOR Ni-Mn (for Attachment)	Severe impact	A low-cost "stainless" joining rod for crushers, dippers, crawlers, dredges	AC-DC Arc only

WIRES FOR AUTOMATIC & SEMI-AUTOMATIC APPLICATION

This Wire	For These Conditions	This equipment or use
VA 0	Severe abrasion; moderate impact	Crushers of all types, tool joints, mullers
VA 1X	Abrasion & compression with impact	Scrapers, bucket teeth, crushers
VA 2X	Severe compression & impact with abrasion	Steel mill rolls, dredge rolls, cable sheaves
VA 3	Severe abrasion & compression with impact	Mill guides, crushers, grinders
VA 4X	Severe impact & compression	Build-up on trunnions, tractor idlers & tracks
VA 5X	Severe metal-to-metal impact & abrasion	Shovel rollers, tractor rollers & idlers
VA 6X	Severe impact, high temp., dry bearing	Steel mill rolls, clutches, roll necks
VA 7X	Severe impact & compression with abrasion	Build-up on mine car wheels & tractor rollers
VA 8X	Earthworking abrasion & impact	Dozer blades, scraper blades, tool joints
VA 10	Extremely severe abrasion; moderate impact	Tool joints, crushers, scrapers, swing hammers
VT 60 (Tungsten Carbide)	Maximum abrasion; earth cutting, scraping	Tool joints, scraper blades, augers
Ni-Mn (Hadfield)	Wear, all types manganese steels	Build-up manganese steel parts for overlay or to size

Purnell Alloy Co., Angleton, Texas
Rankin Mfg. Co., Alhambra, Calif.
Reid-Avery Co., Baltimore, Md.
Resisto-loy Co., Grand Rapids, Mich.
Shober Inc., Stockton, Calif.
Sight Feed Generator Co., West Alexandria, Ohio
Smith, A. O., Corp., Milwaukee, Wis.
Stoody Co., Whittier, Calif.
Victor Equipment Co., San Francisco, Calif.
Wall Colmonoy Corp., Detroit, Mich.

HARDFACING MATERIALS

(See: "Hardfacing Wire," "Hardfacing Electrodes," "Hardfacing Welding Rods")

HARDFACING PASTE

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Forney Mfg. Co., Fort Collins, Colo.
Industrial Overlay Metals, Eaton, Ohio
Superweld Corp., N. Hollywood, Calif.
Western Carbide Corp., N. Hollywood, Calif.

HARDFACING WELDING RODS

Air Reduction Sales Co., New York, N. Y.
Allied Weldcraft, Inc., Indianapolis, Ind.
Alloy Rods Co., York, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
American Manganese Steel Co., Chicago Heights, Ill.
Ampco Metal, Inc., Milwaukee, Wis.
Chicago Hardware Foundry Co., N. Chicago, Ill.
Coast Metals, Inc., Little Ferry, N. J.
Crobalt Inc., Ann Arbor, Mich.
Crucible Steel Co., of America, Pittsburgh, Pa.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Gorham Tool Co., Detroit, Mich.
Haynes Stellite Co., Kokomo, Ind.
Industrial Overlay Metals, Eaton, Ohio
MacDonald Co., Inc., The, Reno, Nev.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
McCauley Alloy Sales Co., Chicago, Ill.
Mir-O-Col Alloy Co., Inc., Los Angeles, Calif.
National Cylinder Gas Div., Chicago, Ill.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Rankin Mfg. Co., Alhambra, Calif.
Resistol-Loy Co., Grand Rapids, Mich.
Sight Feed Generator Co., W. Alexandria, Ohio
Stoody Co., Whittier, Calif.
Vascoloy-Ramet Corp., Waukegan, Ill.
Victor Equipment Co., San Francisco, Calif.
Wall Colmonoy Corp., Detroit, Mich.
Western Carbide Corp., N. Hollywood, Calif.

HARDFACING WIRE for Automatic and semiautomatic applications

(See also "Automatic Welding Wire")

Alloy Rods Co., York, Pa.
American Manganese Steel Div., Chicago Heights, Ill.
Crucible Steel Co. of America, Pittsburgh, Pa.
Drawalloy Corp., York, Pa.
Haynes Stellite Co., Kokomo, Ind.
McKay Co., Pittsburgh, Pa.
Victor Equipment Co., San Francisco, Calif.
Sight Feed Generator Co., West Alexandria, Ohio
Stoody Co., Whittier, Calif.

HARDNESS-TESTING EQUIPMENT

American Machine & Metals, Inc., East Moline, Ill.
Ames, B. C., Co., Waltham, Mass.
Baldwin-Lima-Hamilton Corp., Philadelphia, Pa.
Buehler, Ltd., Chicago, Ill.
Detroit Testing Machine Co., Detroit, Mich.
Eastern Welding Equipment Co., New York, N. Y.
Gordon Claud S. Co., Chicago, Ill.
Industrial Overlay Metals, Eaton, Ohio
Riehle Testing Machine Div., American & Metals, Inc., East Moline, Ill.
Steel City Testing Machines, Inc., Detroit, Mich.
Wilson Mechanical Instrument Co., Inc., New York, N. Y.

HATS, Safety

American Industrial Safety Equipment Co., Inc., Cleveland, Ohio
Boyer-Campbell Co., Detroit, Mich.
Bullard, E. D. Co., Sausalito, Calif.
Chicago Eye Shield Co., Chicago, Ill.
Davis Emergency Equipment Co., Inc., Newark, N. J.
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
General Detroit Corp., The, Detroit, Mich.
Glendale Optical Co., Inc., Valley Stream, N. Y.
Holcomb Safety Garment Co., Chicago, Ill.
Industrial Gloves Co., Danville, Ill.
Industrial Products Co., Philadelphia, Pa.
Jackson Products, Inc., Warren, Mich.
Kedman Co., Salt Lake City, Utah.
McDonald, B. F., Co., Los Angeles, Calif.
Metro Mfg. Co., Long Island City, N. Y.
Milburn Co., Detroit Mich.
Mine Safety Appliances Co., Pittsburgh, Pa.
Pacific Transducer Corp., Los Angeles, Calif.
Pulmosan Safety Equip. Co., Brooklyn, N. Y.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
United States Safety Service Co., Kansas Cit Mo.

HEADS, Automatic Arc

(See: "Automatic Welding Heads")

HEAT-TREATING METAL SALTS

American Cyanamid Co., New York, N. Y.
du Pont de Nemours, E. I. & Co., Inc. Wilmington, Del.
Holden, A. E., Co., The, New Haven, Conn.
Houghton E. F. & Co., Philadelphia, Pa.
Standard Research Inc., New Haven, Conn.

HELIUM

Air Reduction Sales Co., New York, N. Y.
American Gas & Chemical Corp., Harrison, N. J.
American Oxygen Service Corp., Harrison, N. J.
Buckeye Oxygen Co., Canton, Ohio
Burdett Oxygen Co., The, Cleveland, Ohio
Commercial Gas Corp., Wilkes-Barre, Pa.
Industrial Air Prod. Co., Portland, Ore.
Linde Co., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
National Welders Supply Co., Inc., Charlotte, N. C.
New England Gas Products, Inc., Charlestown, Mass.
Southern Oxygen Co., Washington, D. C.
Steele Gases, Inc., Forest Park, Ill.
Stuart Oxygen Co., San Francisco, Calif.
Welding Materials, Inc., Lemoyne, Pa.
Wolverine Gas Products, Inc., Saginaw, Mich.

HELMETS, Arc Welding

American Industrial Safety Equipment Co., Cleveland, Ohio.
American Optical Co., Southbridge, Mass.
Boyer-Campbell Co., The, Detroit, Mich.
Bullard, E. D., Co., The, San Francisco Calif.
Burdett Oxygen Co. Cleveland, Ohio
Carter-Lockard Co., Los Angeles, Calif.
Chicago, Eye Shield Co., Chicago, Ill.
Davis Emergency Equipment Co., Inc., Newark, N. J.
Dockson Corp., Detroit, Mich.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Fibre-Metal Prod. Co. The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
General Scientific Equip. Co., Philadelphia, Pa.
Glendale Optical Co., Inc., Valley Stream, N. Y.
Hobart Bros. Co., Troy, Ohio
Holcomb Safety Garment Co., Chicago, Ill.
Industrial Products Co., Philadelphia, Pa.
Jackson Products, Inc., Warren, Mich.
Kedman Co., Salt Lake City, Utah
McFerron-Myers Prod. Co., Cleveland, Ohio
Metro Mfg. Co., Long Island City, N. Y.
Mine Safety Appliances Co., Pittsburgh, Pa.
Pulmosan Safety Equip. Corp., Brooklyn, N. Y.
Safety Clothing & Equip. Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Sellstrom Mfg. Co., Palatine, Ill.
Welding Apparatus Co., Chicago, Ill.
Welsh Mfg. Co., Providence, R. I.
Willson Products, Inc., Reading, Pa.

HELMETS, Periscope

Industrial Prods. Co., Philadelphia, Pa.

HELMETS, with Safety Hat

American Industrial Safety Equipment Co., Inc., Cleveland, Ohio
Boyer-Campbell Co., The, Detroit, Mich.
Bullard, E. D., Co., The, Sausalito, Calif.
Champion Rivet Co., Cleveland, Ohio
Chicago Eye Shield Co., Chicago, Ill.
Davis Emergency Equipment Co., Inc., Newark, N. J.
Dockson Corp., Detroit, Mich.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
Glendale Optical Co., Inc., Valley Stream, N. Y.
Hobart Bros. Co., Troy, Ohio
Holcomb Safety Garment Co., Chicago, Ill.
Industrial Gloves Co., Danville, Ill.
Industrial Products Co., Phtiladelphia, Pa.
Jackson Prod. Inc., Warren, Mich.
Kedman Co., Salt Lake City, Utah
McDonald, B. F., Co., Los Angeles, Calif.
Metro Mfg. Co., Long Island City, N. Y.
Mine Safety Appliances Co. Pitssburgh, Pa.

JACKSON

SAFETY HATS and CAPS

Made of fiber glass for lightness, and rigidly tested for maximum protection, with an exclusive, extruded plastic headband for better fit, the full-brimmed HAT (left) and the CAP (right) are available in seven standard colors.

CAP-and-HELMETS

Jackson arc welding helmets are pivoted from the sides of the safety cap. Other combinations are Cap-and-Goggles, Hat-and-Face Shields.

Jackson Products

WARREN - MICHIGAN

ARC WELDING HELMETS

HELMET SHELLS of fiber glass outlast vulcanized fibre many times; made in three styles.

ADJUST-O-LOCK Headgear of long wearing Nylon plastic has large winged knob for head-size adjustment, and has an adjustable cross strap as well.

FRICTION PIVOTS, also of insulative Nylon, have wing nuts for quick adjustment; adjustable stop halts down-swing where desired.

LENS HOLDERS offer choice of fixed types in metal or high-impact, insulative plastic, and a plastic lift front.

Jackson Products

WARREN - MICHIGAN

Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Willson Products, Inc., Reading, Pa.

HELMETS, Supplied-Air

American Allsafe Co., Inc., Buffalo, N. Y.
American Industrial Safety Equipment Co., Inc., Cleveland, Ohio
Boyer-Campbell Co., The, Detroit, Mich.
Bullard, E. D., Co., The, Sausalito, Calif.
Burdett Oxygen Co. Cleveland, Ohio
Chicago Eye Shield Co., Chicago, Ill.
Davis Emergency Equipment Co., Inc., Newark, N. J.
Dockson Corp., Detroit, Mich.
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
General Scientific Equipment Co., Philadelphia, Pa.
Industrial Glove Co., Danville, Ill.
Industrial Products Co., Philadelphia, Pa.
McDonald, B. F., Co., Los Angeles, Calif.
Metro Mfg. Co., Long Island City, N. Y.
Mine Safety Appliances Co. Pittsburgh, Pa.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Pulmosan Safety Equipmen Corp., Brooklyn, N. Y.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Willson Products, Inc., Reading, Pa.

HELMETS and MASKS, Sand Blast

Boyer-Campbell Co., The, Detroit, Mich.
Bullard, E. D., Co., The, Sausalito, Calif.
Chicago Eye Shield Co., Chicago, Ill.
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
General Scientific Equip. Co., The, Chester, Pa.
Holcomb Safety Garment Co., Chicago, Ill.
Industrial Gloves Co., Danville, Ill.
Industrial Products Co., Philadelphia, Pa.
MacLeod Co., The, Cincinnati, Ohio
McDonald, B. F., Co., Los Angeles, Calif.
Mine Safety Appliance Co. Pittsburgh, Pa.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Pangborn Corp., Hagerstown, Md.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Sellstrom Mfg. Co., Palatine, Ill.
U. S. Rubber Co., New York, N. Y.
Willson Products, Inc., Reading, Pa.

HIGH FREQUENCY UNITS

(See: "Conversion Units, A-C Arc")

HIGH-TENSILE ELECTRODES

Air Reduction Sales Co., New York, N. Y.
Allied Weld-Craft, Inc., Indianapolis, Ind.
Alloy Rods Co., York, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
Champion Rivet Co., Cleveland, Ohio
Eutectic Welding Alloys Corp., Flushing, N. Y.
General Electric Co., Schenectady, N. Y.
Harnischfeger Corp., Milwaukee, Wis.
Hobart Bros. Co., Troy, Ohio
Lincoln Electric Co., The, Clevelnd, Ohio
Marquette Mfg. Co., Inc. Minneapolis Minn.
McKay Co., Pittsburgh, Pa.
Metal & Thermit Corp. Rahway, N. J.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Page Steel & Wire Div., Amer. Chain & Cable Co., Inc., Monessen, Pa.
Reid-Avery Co., Baltimore, Md.
Shober Inc., Stockton, Calif.
Smith, A. O., Corp., Milwaukee, Wis.
Westinghouse Electric Corp., Buffalo, N. Y.

HIGH-TENSILE WELDING RODS

Air Reduction Sales Co., New York, N. Y.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
Atlas Corp., Philadelphia, Pa.
Crucible Steel Co. of America, Pittsburgh, Pa.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Linde Co., New York, N. Y.
Marquette Mfg. Co., Minneapolis, Minn.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys Inc., Red Bank, N. J.
Shober Inc., Stockton, Calif.
Reid-Avery Co., Baltimore, Md.
Weldit, Inc., Detroit, Mich.

HOISTING CRABS

American Hoist & Derrick Co., St. Paul, Minn.
Cleveland Crane & Engineering Co., The Wickliffe, Ohio
Grand Specialties Co., Chicago, Ill.
Merrill Bros., Maspeth, N. Y.
Northern Engineering Works, Detroit, Mich.
Renfroe, J. C. & Sons, Inc., Jacksonville, Fla.
Round, David & Son, Cleveland, Ohio
Sasgen Derrick Co., Chicago, Ill.
Wright Hoist Div. of Amer. Chain & Cable Co., Inc., York, Pa.

HOLE SAWS

Anderson Corp., Worcester, Mass.
Armstrong-Blum Mfg. Co., Chicago, Ill.
Aro Equipment Corp., The, Towson, Md.
Black & Decker Mfg. Co., The, Towson, Md.
Disston, Henry, & Sons, Inc., Tacony, Philadelphia, Pa.
Millers Falls Co., Greenfield, Mass.
Misener Manufacturing Co., Inc., Syracuse, N. Y.
Porter-Cable Machine Co., Syracuse, N. Y.
Skil Corp., Chicago, Ill.
Stanley Electric Tools, Div. of the Stanley Works, New Britain, Conn.
Stow Mfg. Co., Binghamton, N. Y.
Thor Power Tool Co., Chicago, Ill.
U. S. Electrical Tool Co., Cincinnati, Ohio
Van Dorn Electric Tool Co., Towson, Md.

HOSE CLAMPS

Acetogen Gas Co., Detroit, Mich.
Aircraft Standard Parts Co., Inc., Newark, N. J.
American Stamping Co., Battle Creek, Mich.
Aro Equipment Corp., The, Bryan, Ohio
Boston Woven Hose & Rubber Co., Cambridge, Mass.
Chicago Pneumatic Tool Co., New York, N. Y.
Cleco Div., Reed Roller Bit Co., Houston, Texas
Corbin Screw Division of The American Hardware Corp., New Britain, Conn.
Dixon Valve & Coupling Co., Philadelphia, Pa.
Dockson Corp., Detroit, Mich.
Fauver, J. N., Co., Inc., Detroit, Mich.
Goodall Rubber Co., Trenton, N. J.
Harris Calorific Co., The, Cleveland, Ohio
Hewitt-Robins, Inc., Stamford, Conn.
Home Rubber Co., Trenton, N. J.
Hose Accessories Co., Philadelphia, Pa.
Imperial Brass Mfg. Co., The, Chicago, Ill.
K-G Equipment Co., Allentown, Pa.
Knox Mfg. Co., Philadelphia, Pa.
Linde Co., New York, N. Y.
Metro Mfg. Co., Long Island City, N. Y.
Mulconroy Co., Philadelphia, Pa.
National Torch Tip Co., Pittsburgh, Pa.
Oxo Welding Equipment Co., New Lenox, Ill.
Punch-Lok Co., Chicago, Ill.
Republic Rubber Div., Lee Rubber & Tire Corp., Youngstown, Ohio
Schrader's, A., & Son, Div. of Scovill Mfg. Co., Inc., Brooklyn, N. Y.
Scovill Mfg. Co., Waterbury, Conn.
Sherman, H. B., Mfg. Co., Battle Creek, Mich.
Thor Power Tool Co., Chicago, Ill.
Uniflex Cable Co., Detroit, Mich.
Western Enterprises, Inc., Bay Village, Ohio

HOSE COUPLINGS AND FITTINGS

Acetogen Gas Co., Detroit, Mich.
Aro Equipment Corp., Bryan, Ohio
Bastian-Blessing Co., The, Chicago, Ill.
Chicago Pneumatic Tool Co., New York, N. Y.
Cleco Div. of Reed Roller Bit Co., Houston, Texas
Crane Co., Chicago, Ill.
DeVilbiss Co., The, Toledo, Ohio
Dixon Valve & Coupling Co., Philadelphia, Pa.
Dockson Corp., Detroit, Mich.
Fauver, J. N., Co., Inc., Detroit, Mich.
Flexonics Corp., Maywood, Ill.
General Detroit Corp., Detroit, Mich.
Harris Calorific Co., The, Cleveland, Ohio
Hewitt-Robins, Inc., Stamford, Conn.
Hose Accessories Co., Philadelphia, Pa.
Jordan Industrial Sales Div., Cincinnati, Ohio
K-G Equipment Co., Allentown, Pa.
Linde Co., New York, N. Y.
Metro Mfg. Co., Long Island, N. Y.
Mulconroy Co., Philadelphia, Pa.
Nageldinger, J., & Son, Inc., New York, N. Y.
National Torch Tip Co., Pittsburgh, Pa.
Norgren Co., C. A., Denver, Colo.
Oxo Welding Equipment Co., New Lenox, Ill.
Paasche Airbrush Co., Chicago, Ill.
Punch-Lok Co., Chicago, Ill.
Red Devil Mfg. Co., Chicago, Ill.
Rotor Tool Co., Cleveland, Ohio
Schrader's, A., & Son, Div. of Scovill Mfg. Co., Inc., Brooklyn, N. Y.
Scovil Mfg. Co., Waterbury, Conn.
Sherman, H. B., Mfg. Co., Battle Creek, Mich.
Snap-Tite, Inc., Erie, Pa.
S-S Co., Brooklyn, N. Y.
Superior Pneumatic & Mfg., Inc., Cleveland, Ohio
Superior Valves & Fittings Co., Pittsburgh, Pa.
Thor Power Tool Co., Aurora, Ill.
Western Enterprises Inc., Bay Village, Ohio
Wright Hoist Div., American Chain & Cable Co., York, Pa.

HOSE AND CABLE REELS

Hardie Engineering Co., Inc., Roanoke, Va.
Heffner Products, Jackson, Mich.
United Specialty Corp., Eldorado, Ark.

HYDRAULIC CYLINDERS

Acme Electric Welder Co., Los Angeles, Calif.
Banner Welder, Inc., Milwaukee, Wis.
Blackhawk Mfg. Co., Milwaukee, Wis.
Delta Welder Corp., Detroit, Mich.
Hannifin Corp., Des Plaines, Ill.
Lapeer Mfg. Co., Detroit, Mich.
Lindberg Engineering Co., Chicago, Ill.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Miller Fluid Power Co., Melrose Park, Ill.
Studebaker Machine Co., Maywood, Ill.
Swift Electric Welder Co., Detroit, Mich.

HYDROGEN

Air Products Inc., Allentown, Pa.
Air Reduction Sales Co., New York, N. Y.
American Gas & Chemical Corp., Harrison, N. J.
American Oxygen Service Corp., Harrison, N. J.
Burdett Oxygen Co., The, Cleveland, Ohio
Commercial Gas Corp., Wilkes-Barre, Pa.
Delta Oxygen Co., Memphis, Tenn.
Dye Oxygen Co., Inc., Phoenix, Ariz.
Gaspro Ltd., Honolulu, Hawaii
Independent Engineering Co., Inc., O'Fallon, Ill.
Indiana Oxygen Co., Indianapolis, Ind.
Industrial Air Products Co., Portland, Ore.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
National Cylinder Gas Div., Chicago, Ill.
New England Gas Products, Inc., Charlestown, Mass.
Southern Oxygen Co., Bladensburg, Md.
Steele Gases, Inc., Chicago, Ill.
Stuart Oxygen Co., San Francisco, Calif.
Superior Industrial Gas Corp., Astoria, N. Y.
Welding Materials, Inc., Lemoyne, Pa.
Western Oxygen, Inc., Seattle, Wash.

HYDROGEN GENERATORS

Air Products, Inc., Allentown, Pa.
Independent Engineering Co., O'Fallon, Ill.

INCONEL WELDING RODS

Air Reduction Sales Co., New York, N. Y.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
International Nickel Co., Inc., The, New York, N. Y.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Phillips, C. E., & Co., Detroit, Mich.

For complete addresses of manufacturers listed here, turn to the section beginning on page 102.

AND . . .

For more information on these products, use the postpaid cards at the back of this issue

ELECTRIC-ARC INC.

One of a Series on Applications of Electric Arc's Smith-Dolan Units—Today's Most Versatile Heat-Treating Tools.

STOP WELD FAILURE with the SMITH-DOLAN SYSTEM of Low-Frequency Induction Heating

Here is the versatile heat-treating tool you need for producing sound welds easily and economically in carbo-alloy and other types of steel pipe . . . here is precision control of heating cycle when pre-heating and stress relieving — uniform, through-and-through heating of solid sections up to two feet thick and more — pushbutton operation — complete portability for on-the-job heat treating anywhere.

Many Money-Saving Applications — The Smith-Dolan System simplifies and upgrades work quality in numerous applications ranging from welding to forming and annealing. Units are available for 60 cycle heating in capacities ranging from 10 to 150 KVA . . . for 400 cycle heating . . . resistance heating. Pre-engineered with complete instrumentation, accessories.

"On Trial" Installations on Rental Basis — Prove the many Smith-Dolan advantages in your own plant without capital investment. Write, wire or phone.

Electronic recording gives permanent charts of heat run on this standard Smith-Dolan model. Coils permit work at 50 feet or more from unit. Eye hooks provide for easy handling by crane. Products ranging from a fraction of an inch to 10 feet in diameter can be heat treated on the job.

New Brochure — Send today for your copy of "Smith-Dolan System of Low-Frequency Induction Heating."

Electric Arc, inc.

152-3 JELLIFF AVENUE, NEWARK 8, N. J. Bigelow 3-3211

Representatives in Principal Cities

INDUCTION-HEATING EQUIPMENT

Ajax Electrothermic Corp., Trenton, N. J.
Duramic Products Inc., New York, N. Y.
Ecco High Frequency Corp., North Bergen, N. J.
Electric Arc, Inc., Newark, N. J.
Federal Electric Co., Inc., Chicago, Ill.
Federal Telephone and Radio Corp., New York N. Y.
Gordon Co., Claud S., Chicago, Ill.
Illinois Tool Works Electronics Div., Chicago, Ill.
Induction Heating Corp., Brooklyn, N. Y.
Lepel High Frequency Labs., Inc., New York, N. Y.
Lindberg Engineering Co., Chicago, Ill.
Marion Electrical Instrument Co., Manchester, N. H.
Ohio Crankshaft Co., The, Tocco Div., Cleveland, Ohio
Radio Frequency Co., Inc., Medfield, Mass.
Westinghouse Elec. Corp., Pittsburgh, Pa.

INGOTS

(Refer to specific metal)

INDUSTRIAL WHEELS

Dico Corp., Des Moines, Iowa
Motor Wheel Co., Lansing, Mich.
Neilson Wheel Co., Milwaukee, Wis.
Osborn Mfg. Co., The, Cleveland, Ohio
Thomas Truck & Caster Co., Keokuk, Iowa
Young, C. W., Mfg. Co., Syracuse, N. Y.

INERT-GAS SPOT WELDERS

Air Reduction Sales Co., New York, N. Y.
Hobart Bros. Co., Troy, Ohio
Linde Co., New York, N. Y.
Mid-States Welder Mfg. Co., Chicago, Ill.
Smith, A. O., Corp., Milwaukee, Wis.
Taylor-Winfield Corp., Warren, Ohio
Tec Torch Co., Inc., Carlstadt, N. J.
Welduction Corp., Oak Park, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.

INERT-GAS WELDING WIRE

(See also "Automatic Welding Wire")

Air Reduction Sales Co., New York, N. Y.
Aladdin Rod & Flux Mfg. Co., Grand Rapids, Mich.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Aluminum Co. of America, Pittsburgh, Pa.
American Brazing Alloys Co., Pelham, N. Y.
Ampco Metal, Inc., Milwaukee, Wis.
Arcos Corp., Philadelphia, Pa.
Bridgeport Brass Co., Bridgeport, Conn.
Collins-Edmonds, Inc., Philadelphia, Pa.
Crucible Steel Co. of America, Pittsburgh, Pa.
Drawalloy Corp., York, Pa.
Eutectic Welding Alloys Corp., Flushing, N. Y.
K-G Equipment Co., Allentown, Pa.
Lincoln Electric Co., The, Cleveland, Ohio
Linde Co., New York, N. Y.
McKay Co., The, Pittsburgh, Pa.
Metal & Thermit Corp., Rahway, N. J.
Morris, Wheeler & Co., Philadelphia, Pa.
Pacific Welding Alloys Mfg., Los Angeles, Cal.
Page Steel & Wire Div., Amer. Chain & Cable Co., Inc., Monessen, Pa.
Reid-Avery Co., Baltimore, Md.
Sight Feed Generator, West Alexandria, Ohio
United Wire & Supply Corp., Providence, R. I.
Welding Alloys Mfg. Co., Newark, N. J.
Westinghouse Electric Corp., Buffalo, N. Y.

INHALATION THERAPY EQUIPMENT

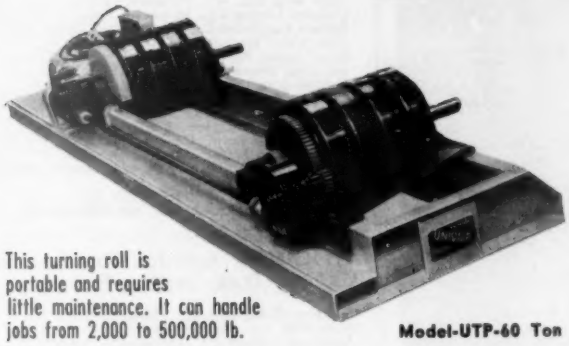
Davis Emergency Equipment Co., Inc., Newark, N. J.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
NCG Div., Chematron Corp., Chicago
Nageldinger, J. & Son, Inc., New York, N. Y.
National Welding Equipment Co., San Francisco, Calif.
OEM Corp., E. Norwalk, Conn.
Ohio Chemical & Surgical Equipment Co., Div. of Air Reduction Co., Madison, Wis.
Puritan Compressed Gas Corp., Kansas City, Mo.
Smith Welding Equipment Co., Minneapolis, Minn.

INSERTS, Tungsten Carbide

American Manganese Steel Co., Chicago Heights, Ill.
Haynes Stellite Co., Kokomo, Ind.
Industrial Overlay Metals Inc., Eaton, Ohio
Permalatam Welding Alloys, Inc., Red Bank, N. J.
Purnell Alloy Co., Angleton, Texas
Stoody Co., Whittier, Calif.
Vascoloy-Ramet Corp., Waukegan, Ill.

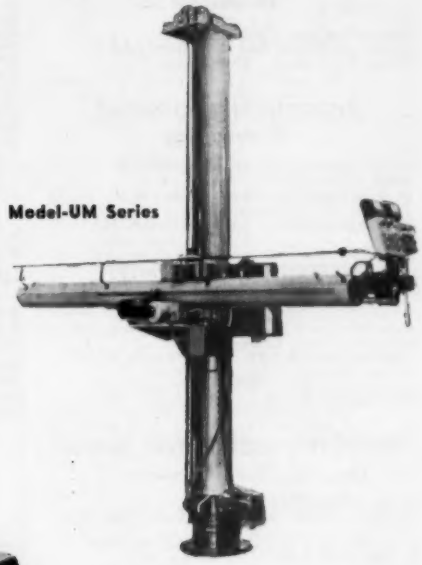
Cut your welding costs, improve your weldments

By using Unique equipment you can slash your welding costs in half, reduce handling of work, yet increase your welding production and perfection.



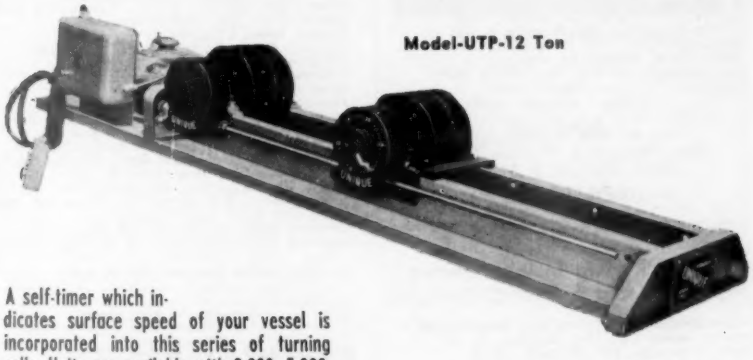
This turning roll is portable and requires little maintenance. It can handle jobs from 2,000 to 500,000 lb.

Model-UTP-60 Ton



Model-UM Series

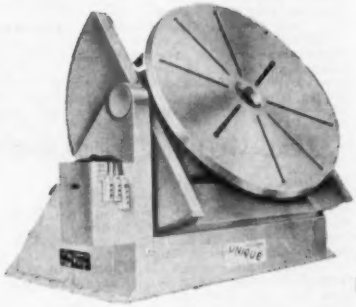
Model-UTP-12 Ton



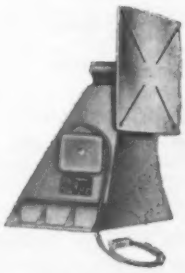
A self-timer which indicates surface speed of your vessel is incorporated into this series of turning rolls. Units are available with 3,000, 5,000, 10,000 and 20,000 lb capacities.

Here is a Unique welding head manipulator featuring variable speeds from 0 to 100 ipm. It has a double chain lift for safety, completely adjustable boom for leveling, and comes in sizes ranging from 6 by 6 ft, to 16 by 20 ft.

Welding positioners, when combined with other Unique equipment, will make your weldor a one-man production line—with push-button accuracy all the way. These precision gear-driven positioners are available in models ranging in capacity from 250 lb to 100 tons.



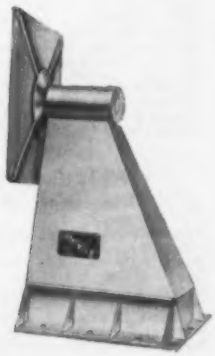
Model-UHDP-75 Ton



Unique Equipment, Inc.

Exclusive designers of positioning equipment

122 SUMPTER STREET BROOKLYN 33, NEW YORK



These head and tailstocks will provide you with variable or constant speeds, and can handle from 1,000 to 200,000 lb.

INSPECTION, Dye Penetrant

Magnaflux Corp., Chicago, Ill.
Met-L-Chek Co., Los Angeles, Calif.
Turco Products, Inc., Los Angeles, Calif.

INSPECTION EQUIPMENT, Cables

Dillon, W. C. & Co., Inc., Van Nuys, Calif.
Hazard Insulated Wire Works, Wilkes-Barre, Pa.
Zucker, Myron Eng. Co., Detroit, Mich.

INSPECTION EQUIPMENT, Fluorescent

Magnaflux Corp., Chicago, Ill.
Philips Electronics, Inc., Mt. Vernon, N. Y.
Picker X-Ray Corp., White Plains, N. Y.

INSPECTION EQUIPMENT, Gamma Ray

Curtiss-Wright Corp., Princeton, N. J.
Metal & Thermit Corp., Rahway, N. J.
St. John X-Ray Laboratory, Califon, N. J.
Tracelab Inc., Waltham, Mass.
Westinghouse Electric Corp., Baltimore, Md.

INSPECTION EQUIPMENT, Magnetic-Particle

Ferro Machine & Tool Corp., Indianapolis, Ind.
Magnaflux Corp., Chicago, Ill.
Peterson Machine Tool, Inc., Merriam Kan.
Philips Electronics, Inc., Mt. Vernon, N. Y.
U. S. Casting Repair Corp., Philadelphia, Pa.
Westinghouse Electric Corp., Baltimore, Md.

INSPECTION EQUIPMENT, Radium

(See also: "Radium Inspection")

Curtiss Wright Corp., Princeton, N. J.
Canadian Radium & Uranium Corp., New York, N. Y.
Lewis Welding & Engrg. Corp., Bedford, Ohio
St. John X-Ray Laboratory, Califon, N. J.
Westinghouse Electric Corp., Baltimore, Md.

INSPECTION EQUIPMENT Ultrasonic

Acoustica Associates, Inc., Mineola, N. Y.
Aeroprojects, Inc., West Chester, Pa.
Dice, J. W. Co., Englewood, N. J.
Electrocircuits, Inc., Pasadena, Calif.
Gulton Industries, Metuchen, N. J.
Narda Ultrasonics Corp., Mineola, N. Y.
National Ultrasonic Corp., Irvington, N. J.
Sperry Products, Inc., Danbury, Conn.

INSPECTION EQUIPMENT, X-Ray

Balteau Electric Corp., Stamford, Conn.
Bar-Ray Products, Inc., Brooklyn, N. Y.
Claude S. Gordon Co., Chicago, Ill.
Curtiss-Wright Corp., Princeton, N. J.
E. I. duPont de Nemours & Co., Inc., Pattern Screer Div., Towanda, Pa.
General Electric Co., X-Ray Div., Milwaukee, Wis
High Voltage Engineering Corp., Burlington, Mass.
Kelley-Koett Mfg. Co., The, Covington, Ky.
Machinery & Welder Corp., Chicago, Ill.
Machlett Laboratories, Inc., Springdale, Conn.
Mitchell Radiation Products Corp., Norristown, Pc
North American Philips Co., Inc., New York, N. Y.
Philips Electronics, Inc., Mt. Vernon, N. Y.
Picker X-Ray Corp., White Plains, N. Y.
Ray Proof Corp., New York, N. Y.
St. John X-Ray Laboratory, Califon, N. J.
St. John X-Ray Service, Inc., Long Island City, N. Y.
Standard X-Ray Co., Chicago, Ill.
Tracelab, Inc., Waltham, Mass.
Triplett & Barton, Inc., Burbank, Calif.
Westinghouse Electric Corp., Baltimore, Md.

INSTRUMENTS, Current Measuring, A-C & D-C

Automatic Temperature Control Co., Inc., Philadelphia, Pa.
Brush Development Co., The, Cleveland, Ohio
Columbia Electric Mfg. Co., Cleveland, Ohio
General Electric Co., Schenectady, N. Y.
Sticht Co., Inc., Herman H., New York, N. Y.
Weltronic Co., Detroit, Mich.
Westinghouse Electric Corp., Pittsburgh, Pa.
Weston Electric Instrument Corp., Newark, N. J.

INSTRUMENTS, Training Aids

Automatic Temperature Control Co., Inc., Philadelphia, Pa.
Bausch & Lomb Optical Co., Rochester, N. Y.
Bristol Co., The, Waterbury, Conn.
Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.
Rapidesign, Inc., Glendale, Calif.
Rubicon Co., Philadelphia, Pa.

JIGS, FIXTURES and MANIPULATORS

(See also: "Positioners")

Acro Welder Mfg. Co., Milwaukee, Wis.
Airline Welding & Engineering, Hawthorne, Calif.
Aronson Machine Co., Arcade, N. Y.
Automatic Welding Co., Tulsa, Okla.
Automatic Welding Co., Waukesha, Wis.
Banner Mfg. Co., Milwaukee, Wis.
Bentley Weldery, Inc., Syracuse, N. Y.
Cayuga Machine & Fabr. Co., Inc., Depew, N. Y.
Duramic Products, Inc., New York, N. Y.
Eisler Engineering Co., Inc., Newark, N. J.
Federal Machine & Welder Co., The, Warren, Ohio
Guide-Weld Co., The, Fresno, Calif.
Herrick Co., C. B., Cleveland, Ohio
Lewis Welding & Engrg. Corp., Bedford, Ohio
Martin Electric Co., Detroit, Mich.
Miami Specialties Co., Troy, Ohio
Morton Mfg. Co., Muskegon Heights, Mich.
Multi-Hydromatic Welding & Mfg. Co., East Detroit, Mich.
Overbeke-Kain Co., The, Bedford, Ohio
Pandjiris Weldment Co., St. Louis, Mo.
Peck, Cecil C., Co., Cleveland, Ohio
Penn Tool & Machine Co., Danville, Ill.
Progressive Welder Sales Co., Detroit, Mich.
Resistance Welder Corp., Detroit, Mich.
Sciaky Bros., Inc., Chicago, Ill.
Swift Electric Welder Co., Detroit, Mich.
Unique Equipment, Inc., Brooklyn, N. Y.
Vangtronic Corp., The, Bridgeport, Conn.
Webb Corp., Webb City, Mo.
Welding Machines Mfg. Co., Detroit, Mich.
Wolverine Tool Co., Detroit, Mich.

JUMPERS

(See: "Resistance Welding Cables")

KEY HOLDER

Lummis Mfg. Co., Pasadena, Calif.

LADLES, Metal Melting, Pouring and Skimming

American Car and Foundry Co., New York, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Bernz, Otto, Co., Inc., Rochester, N. Y.
Clayton & Lambert Mfg. Co., Louisville, Ky.
Diener, Geo. W., Mfg. Co., Chicago, Ill.
Dixon, Joseph, Crucible Co., Jersey City, N. J.
Eclipse Fuel Engineering Co., Rockford, Ill.
General Detroit Corp., The, Detroit, Mich.
General Scientific Equip. Co., Philadelphia, Pa.
Hollands Mfg. Co., Erie, Pa.
Peck, Stow & Wilcox Co., Southington, Conn. (Metal melting only.)
Phoenix Products Co., Milwaukee, Wis.
Salem Tool Co., The, Salem, Ohio
Syracuse Alloy Metals Corp., Syracuse, N. Y.
Unique Mfg. Co., Inc., Chicago, Ill.
Whiting Corp., Harvey, Ill.

LEAD WELDING EQUIPMENT

Acetogen Gas Co., Detroit, Mich.
Air Reduction Sales Co., New York, N. Y.
American Oxygen Service Corp., Harrison, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Craftsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
Federal Tool Engineering Co., Cedar Grove, N. J.
General Scientific Equip. Co., Philadelphia, Pa.
Goss Gas, Inc., Glenshaw, Pa.
Harris Calorific Co., The, Cleveland, Ohio
Imperial Brass Mfg. Co., Chicago, Ill.
Insto-Gas Corp., Detroit, Mich.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Milburn, Alexander, Inc., Baltimore, Md.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
Sight-Feed Generator Co., West Alexandria, Ohio
Smith Welding Equip. Corp., Minneapolis, Minn.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Trindl Products, Ltd., Chicago, Ill.
Welders Supply & Mfg. Co., Cincinnati, Ohio

LEAK DETECTORS

Davis Emergency Equipment Co., Inc., Newark, N. J.
Eisler Engineering Co., Inc., Newark, N. J.
Linde Co., New York, N. Y.
Mine Safety Appliances Co., Pittsburgh, Pa.
National Cylinder Gas Co., Chicago, Ill.
Vacuum Tube Products Co., Oceanside, Calif.

LEATHER, Weldors'

(See also specific item such as: "Aprons," "Capes," "Coats," "Gloves," "Overalls," "Pants," Etc.)

A & A Mfg. Co., Milwaukee, Wis.
Aljay Mfg. Co., Inc., Philadelphia, Pa.
Colonial Leather Co., Milwaukee, Wis.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
Industrial Gloves Co., Danville, Ill.
Kimball Safety Prod. Co., Cleveland, Ohio
Lichtman & Sons, J., Newark, N. J.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Racine Glove Co., Inc., Rio, Wis.
Riegel Textile Corp., Conover, N. C.
Tillman, John & Co. Long Beach, Calif.
Twentieth Century Glove Corp. of Texas, Atlanta, Texas
Universal Leather Co., Inc., Berlin, Wis.
Wheeler Protective Apparel, Inc., Chicago, Ill.

LEGGINGS, Asbestos, Fire Resistant Duck, Leather, Etc.

Advance Glove Mfg. Co., Detroit, Mich.
Aljay Mfg. Co., Inc., Philadelphia, Pa.
American Optical Co., Southbridge, Mass.
Associated Bag & Apron Co., Chicago, Ill.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Flood Safety Products Co., Chicago, Ill.
General Scientific Equip. Co., Philadelphia, Pa.
Genter, C. D., Co., Chattanooga, Tenn.
Greene, Tweed & Co., North Wales, Pa.
Holcomb Safety Garment Co., Chicago, Ill.
Industrial Gloves Co., Danville, Ill.
Industrial Products Co., Philadelphia, Pa.
Janos Asbestos Co., New York, N. Y.
Kimball Safety Prod. Co., Cleveland, Ohio
McDonald, B. F., Co., Los Angeles, Calif.
Mine Safety Appliances Co., Pittsburgh, Pa.
Olympic Glove Co., Inc., New York, N. Y.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Rabin Glove Co., Jersey City, N. J.
Racine Glove Co., Inc., Rio, Wis.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Standard Safety Equipment Co., Chicago, Ill.
Twentieth Century Glove Corp. of Texas, Atlanta, Texas
Universal Leather Co., Inc., Berlin, Wis.

LENS CLEANERS

American Agile Corp., Bedford, Ohio
American Allsafe Co., Inc., Buffalo, N. Y.
American Optical Co., Southbridge, Mass.
Boyer-Campbell Co., The, Detroit, Mich.
Carhoff Co., Cleveland, Ohio
Eastman Kodak Co., Rochester, N. Y.
General Scientific Equipment Co., Philadelphia, Pa.
Klem Chemicals, Inc., Dearborn, Mich.
Merix Chemical Co., Chicago, Ill.
Mine Safety Appliances Co., Pittsburgh, Pa.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety Clothing & Equip. Co., Cleveland, Ohio
Saftey First Supply Co., Pittsburgh, Pa.
United States Safety Service Co., Kansas City, Mo.
Willson Products, Inc., Reading, Pa.

LENS COATING, Against Pitting

American Agile Corp., Bedford, Ohio
American Industrial Safety Equip. Co., Cleveland, Ohio
Bullock, L. H., Co., Richmond, Calif.
Dockson Corp., Detroit, Mich.
Faulk, F. R., Equipment Sales, Pittsburgh, Pa.
General Scientific Equipment Co., Pittsburgh, Pa.
Glendale Optical Co., Inc., Valley Stream, N. Y.
Safety First Supply Co., Pittsburgh, Pa.
Thermacote Co., Pasadena, Calif.
Wallace Optical Co., Inc., Detroit, Mich.

LENSES

(See "Glass Lenses" and "Goggle and Helmet Lenses")

LENS PROTECTORS

American Industrial Safety Equip. Co., Cleveland, Ohio
Bausch & Lomb Optical Co., Rochester, N. Y.
Bullock, L. H., Co., Richmond, Calif.
Dockson Corp., Detroit, Mich.
Eastern Safety Equip. Co., New York, N. Y.
General Scientific Equipment Co., Pittsburgh, Pa.
Kimball Safety Prod. Co., Cleveland, Ohio
Mine Safety Appliances Co., Pittsburgh, Pa.

Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
Oxo Welding Equipment Co., New Lenox, Ill.
Parker Safety Equipment Co., Irvington, N. J.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety Clothing & Equip. Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Thermacote Co., Pasadena, Calif.
Welding Alloys Mfg. Co., Newark, N. J.
Welsh Mfg. Co., Providence, R. I.
Willson Products, Inc., Reading, Pa.
Wilkie Optical, Inc., Barrington, N. J.

LIGHTER HOLDER

Lummis Mfg. Co., Pasadena, Calif.

LIGHTS, Portable Acetylene

Linde Co., New York, N. Y.
Milburn, Alexander, Inc., Baltimore, Md.
Modern Engineering Co., St. Louis, Mo.

LIME-FERRITIC ELECTRODES

(See: "Low-Hydrogen Electrodes")

LIQUID OXYGEN CYLINDERS and FILLER STATIONS

Cambridge Co., Lowell, Mass.
Linde Co., New York, N. Y.
National Cooler Corp., Cleveland, Ohio
Ronan & Kunzl, Inc., Marshall, Mich.

LOCATORS

(See: "Welding Guides and Supports")

LOW-HYDROGEN ELECTRODES

Air Reduction Sales Co., New York, N. Y.
Allied Weld-Craft, Inc., Indianapolis, Ind.
Alloy Rods Co., York, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Arcos Corp., Philadelphia, Pa.
Champion Rivet Co., Cleveland, Ohio
Eutectic Welding Alloys Corp., Flushing, N. Y.
General Electric Co., Schenectady, N. Y.
Harnischfeger Corp., Milwaukee, Wis.
Lincoln Electric Co., The, Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
McKay Co., The, Pittsburgh, Pa.
Metal & Thermit Corp., Rahway, N. J.
National Cylinder Gas Div., Chicago, Ill.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Reid-Avery Co., Baltimore, Md.
Shober Inc., Stockton, Calif.
Smith, A. O., Corp., Milwaukee, Wis.
Westinghouse Electric Corp., Buffalo, N. Y.

MACHINERY GUARDS and SAFETY APPLIANCES

A & A Mfg. Co., Milwaukee, Wis.
Benjamin Electric Mfg. Co., Des Plaines, Ill.
Boyer-Campbell Co., The, Detroit, Mich.
Chicago Eye Shield Co., Chicago, Ill.
Industrial Products Co., Philadelphia, Pa.
Junkin Safety Appliance Co., Inc., Louisville, Ky.
Mine Safety Appliances Co., Pittsburgh, Pa.
Morrison Prod. Inc., Cleveland, Ohio
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety Clothing & Equipment Co., Cleveland, Ohio
Schrader's, A., & Son Brooklyn N. Y.
Wright-Austin Co. Detroit Mich.

MACHINES, Welding

(See various arc and resistance welder classifications)

MACHINISTS' HAMMERS

American Fork & Hoe Co., Cleveland, Ohio
Billings & Spencer Co., The, Hartford, Conn.
Blackhawk Mfg. Co., Milwaukee, Wis.
Bonney Forge & Tool Works, Allentown, Pa.
Capewell Manufacturing Co., The, Hartford, Conn.
Champion DeArment Tool Co., Meadville, Pa.
Herbrand Tools, Fremont, Ohio
Ideal Industries, Inc., Sycamore, Ill.
Mayhew Steel Products, Inc., Shelburne Falls, Mass.
New Britain Machine Co., The, New Britain, Conn.
Peck, Stow & Wilcox Co., Southington, Conn.
Plomb Tool Co., Los Angeles, Calif.
Plumb, Fayette R., Inc., Philadelphia, Pa.
Skil Corp., Chicago, Ill.
Whitney, W. A., Mfg. Co., Rockford, Ill.
Williams, J. H. & Co., Buffalo, N. Y.

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MARSHALL, MICHIGAN

MAGNETIC-PARTICLE INSPECTION

(See "Inspection Equipment, Magnetic Particle")

MAGNESIUM—Sheets, Plates, Bars, Etc.

American Magnesium Corp., Pittsburgh, Pa.
American Silver Co., Inc., Flushing, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
Brooks & Perkins, Inc., Detroit, Mich.
Dow Chemical Co., The, Midland, Mich.
Revere Copper & Brass, Inc., New York, N. Y.
Whitelight Wire & Supply, Brooklyn, N. Y.
White Metal Rolling & Stamping Corp., Brooklyn, N. Y.

MAGNESIUM FLUXES

(See: "Aluminum Fluxes")

MAGNESIUM WELDING RODS

Aladdin Rod & Flux Mfg. Co., Grand Rapids, Mich.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Arcos Corp., Philadelphia, Pa.
Collins-Edmonds, Inc., Philadelphia, Pa.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Magnesium Co. of America, East Chicago, Ind.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Whitelight Wire & Supply, Brooklyn, N. Y.

MAGNETIC CONTACTORS

Arrow-Hart & Hegeman Elec. Co., Hartford, Conn.
Clark Controller Co., The, Cleveland, Ohio
Cutler-Hammer, Inc., Milwaukee, Wis.
Eisler Engineering Co., Inc., Newark, N. J.
Electric Controller & Mfg. Co., The, Cleveland, Ohio
Federal Electric Products Co., Newark, N. J.
General Electric Co., Schenectady, N. Y.
Graham Mfg. Corp., Ferndale, Mich.
Peer, Inc., Benton Harbor, Mich.
Raytheon Mfg. Co., Waltham, Mass.
Shrader, F. W., Co., Culver City, Calif.
Square D Co., Milwaukee, Wis.
Trumbull Electric Mfg. Co., The, Plainville, Conn.
Vickers Electric Div., St. Louis, Mo.
Weltronic Co., Detroit, Mich.
Westinghouse Electric Corp., Pittsburgh, Pa.

MAGNETIC FLUX

American Manganese Steel Co., Chicago Heights, Ill.
Auto Arc Weld Mfg. Co., Cleveland, Ohio
Linde Co., New York, N. Y.
Superweld Corp., N. Hollywood, Calif.
Western Carbide Corp., N. Hollywood, Calif.

MAGNETIC GROUNDS

Magne Cast Tool Co., Inc., Chicago, Ill.
Magnetrode Corp., Kansas City, Mo.
Stearn Magnetic, Inc., Milwaukee, Wis.
Vanol Corp., St. Louis, Mo.

MAGNIFIERS, Inspection

Bausch & Lomb Optical Co., Rochester, N. Y.
Boyer-Campbell Co., Detroit, Mich.
Brush Development Co., The, Cleveland, Ohio
Flood Safety Products Co., Chicago, Ill.
General Scientific Equipment Co., Philadelphia, Pa.
Industrial Overlay Metals Inc., Eaton, Ohio
RCA Engineering Products Dept., Camden, N. J.
Scherr, George Co., Inc., New York, N. Y.
Stanley Electric Tools, New Britain

MALLETS, Rubber and Composition Head

Chicago Rawhide Mfg. Co., Chicago, Ill.
Goodrich, B. F., Co., The, Akron, Ohio
Goodyear Tire & Rubber Co., Inc., The, Akron, Ohio
Homer Rubber Co., Trenton, N. J.
Link, O. P., Handle Co., Salem, Ind.
Quaker Rubber Corp., Philadelphia, Pa.
Quality Tools Corp., New Wilmington, Pa.
Republic Rubber Division, Lee Rubber & Tire Corp., Youngstown, Ohio
United States Rubber Co., New York, N. Y.

MANGANESE-BRONZE ELECTRODES

Alloy Rods Co., York, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brass Co., Waterbury, Conn.
Ampco Metal, Inc., Milwaukee, Wis.
Champion Rivet Co., Cleveland, Ohio
Dalweld Co., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
National Cylinder Gas Div., Chicago, Ill.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.

MANGANESE-BRONZE WELDING RODS

Air Reduction Sales Co., New York, N. Y.
Allied Weld-Craft, Inc., Indianapolis, Ind.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brass Co., Waterbury, Conn.
Ampco Metal, Inc., Mulwauke, Wis.
Bridgeport Brass Co., Bridgeport, Conn.
Chase Brass & Copper Co., Waterbury, Conn.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Industrial Overlay Metals Inc., Eaton, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Mueller Brass Co., Port Huron, Mich.
Permalatem Welding Alloys, Inc., Neptune, N. J.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Page Steel & Wire Div., Amer. Chain & Cable Co., Inc., Monessen, Pa.
Sight Feed Generator Co., West Alexandria, Ohio

MANGANESE ELECTRODES, 11-14%

Allied-Weld-Craft, Inc., Indianapolis, Ind.
Alloy Rods Co., York, Pa.
American Manganese Steel Div., Chicago Heights, Ill.
Central Steel & Wire Co., Chicago, Ill.
Champion Rivet Co., Cleveland, Ohio
Eutectic Welding Alloys Corp., Flushing, N. Y.
General Electric Co., Schenectady, N. Y.
Harnischfeger Corp., Milwaukee, Wis.
Industrial Overlay Metals, Eaton, Ohio

Lincoln Electric Co., The, Cleveland, Ohio
Manganese Steel Forge Co., Philadelphia, Pa.
Marquette Mfg. Co., Inc. Minneapolis, Minn.
McKay Co., Pittsburgh, Pa.
Mir-O-Col Alloy Co., Inc., Los Angeles, Calif.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
National Welders Supply Co., Charlotte, N. C.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Reid-Avery Co., Baltimore, Md.
Sight-Feed Generator Co., West Alexandria, Ohio
Standard Steel & Wire Co., Bolivar, Pa.
Stoody Co., Whittier, Calif.
Stulz-Sickles Co., Newark, N. J.

MANGANESE STEEL, 11-14%

Allied Steel & Tractor Prod. Corp., Cleveland Ohio
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Manganese Steel Div., Chicago Heights Ill.
Bethlehem Steel Co., Bethlehem, Pa.
Castle, A. M. & Co., Chicago, Ill.
Ford Steel Co., St. Louis, Mo.
Manganese Steel Forge Co., Philadelphia, Pa.
Ryerson, J. T., & Son, Inc., Chicago, Ill.
Standard Steel & Wire Co., Bolivar, Pa.
Stulz-Sickles Co., Newark, N. J.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.

MANIFOLDS, Oxygen, Acetylene, Carbon Dioxide, etc.

Acetogen Gas Co., Detroit, Mich.
Air Reduction Sales Co., New York, N. Y.
American Gas & Chemical Corp., Harrison, N. J.
Bastian Blessing Co., The, Chicago, Ill.
Burdett Oxygen Co., The, Cleveland, Ohio
Commercial Gas Corp., Wilkes-Barre, Pa.
Craftsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
Harris Calorific Co., The, Cleveland, Ohio
Hoke, Inc., Cresskill, N. J.
Independent Engineering Co., O'Fallon, Ill.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
National Cylinder Gas Div., Chicago, Ill.
National Welding Equip. Co., San Francisco, Calif.
Pure Carbonic Co., New York, N. Y.
Smith Welding Equip. Corp., Minneapolis, Minn.
Southern Oxygen Co., Washington, D. C.
S-S Co., Brooklyn, N. Y.
Steele Gases, Inc., Forest Park, Ill.
Superior Air Products Co., Newark, N. J.
Superior Valve & Fittings Co., Pittsburgh, Pa.
Taylor-Wharton Iron & Steel Co., Cincinnati, Ohio
Valley Oxygen Co., Bay City, Mich.
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.

MANIPULATORS

(See "Jigs, Fixtures and Manipulators" and "Positioners")

MASKS

(See: "Gas Masks," "Oxygen Masks," "Paint Spray Masks," and "Sand Blast Masks")

MEASURING TAPES

(See "Rules and Tapes")

METAL CLEANERS

American Welding Alloys Corp., Brooklyn, N. Y.
Best Effect Chemical Co., Inc., Hackensack, N. J.
Carbide & Carbon Chemicals Corp., Unit of Union Carbide & Carbon Corp., New York, N. Y.
Chemclean Products Corp., Brooklyn, N. Y.
Clarkson Laboratories Inc., Philadelphia, Pa.
Colonial Alloys Co., Philadelphia, Pa.
Diversey Corp., The, Metal Industries Dept., Chicago, Ill.
E. I. DuPont de Nemours & Co., Inc., Wilmington, Del.
Eclipse Fuel Engineering Co., Rockford, Ill.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Gumm, Fred, Chem. Co., Inc., Kearney, N. J.
Haas Miller Corp., Philadelphia, Pa.
Hollingshead, R. M., Corp., Camden, N. J.
Houghton, E. F., & Co., Philadelphia, Pa.
Kelite Products, Inc., Los Angeles, Calif.
Klean Chemicals, Inc., Dearborn, Mich.
Krembs & Co., Chicago, Ill.
MacDermid, Inc., Waterbury, Conn.
Miller, Harry Corp., Philadelphia, Pa.
NuSteel Co., Chicago, Ill.
Oakite Products, Inc., New York, N. Y.
Optimus Equipment Co., The, Matawan, N. J.
Pacific Hardware & Steel Co., Inc., San Jose, Calif.

METAL-CUTTING BAND SAW BLADES

Armstrong-Blum Mfg. Co., Chicago, Ill.
Atkins, E. C. & Co., Indianapolis, Ind.
Capewell Mfg. Co., The, Hartford, Conn.
Clemson Bros., Inc., Middletown, N. Y.
Disston Div., H. K. Porter Co., Inc., Philadelphia, Pa.
DoAll Co., The, Des Plaines, Ill.
Famco Machine Co., Racine, Wis.
Foley Mfg. Co., Minneapolis, Minn.
Griffin, G. W., Co., Franklin, N. H.
Heller Tool Co., Newcomerstown, Ohio
Ladish Co., Cudahy, Wis.
Millers Falls Co., Greenfield, Mass.
Simonds Saw & Steel Co., Fitchburg, Mass.
Skil Corp., Chicago, Ill.
Spartan Saw Works, Inc., Springfield, Mass.
Starrett Co., The, L. S. Athol, Mass.
Thompson, Henry G. & Son Co., The, New Haven, Conn.
Wells Mfg. Corp., Three Rivers, Mich.

METAL-CUTTING CIRCULAR SAWS

Allison-Campbell Division, Am. Chain & Cable Co., Inc., West Bridgeport, Conn.
Atkins, E. C., and Co., Indianapolis, Ind.
Black & Decker Mfg. Co., The, Towson, Md.
Blackford Mfg. Co., Inc., Hartford, Ind.
Brown & Sharpe Mfg. Co., Providence, R. I.
Curtis Pneumatic Machinery, Div. of Curtis Mfg. Co., St. Louis, Mo.
DeWalt, Inc., Lancaster, Pa.
Disston Div., H. K. Porter Co., Inc., Philadelphia, Pa.
DoAll Co., The, Des Plaines, Ill.
Foley Mfg. Co., Minneapolis, Minn.
Gorham Tool Co., Detroit, Mich.
Kett Tool Co., Cincinnati, Ohio
Kling Bros. Engineering Works, Chicago, Ill.
Midwest Tool & Mfg. Co., Detroit, Mich.
Morse Twist Drill & Machine Co., New Bedford, Mass.
National Twist Drill & Tool Co., Rochest, Mich.
Ohlen-Bishop Mfg. Co., Columbus, Ohio
Portable Electric Tools, Inc., Chicago, Ill.
Porter-Cable Machine Co., Syracuse, N. Y.
Reltool Corp., Milwaukee, Wis.
Simonds Saw and Steel Co., Fitchburg, Mass.
Skil Corp., Chicago, Ill.
Starrett Co., The, L. S., Athol, Mass.

METAL-CUTTING MACHINES

Allison-Campbell Div., American Chain & Cable Co., West Bridgeport, Conn.
American Pullmax Co., Inc., Chicago, Ill.
Baker Bros., Inc., Toledo, Ohio
Barth Mfg. Co., The, Milldale, Conn.
Black & Decker Mfg. Co., The, Towson, Md.
Brown & Sharpe Mfg. Co., Providence, R. I.
Buckeye Tools Corp., Dayton, Ohio
C-B Tool Co., Lancaster, Pa.
Cleveland Crane & Engineering Co., The, Wickliffe, Ohio
Clark, Robert H., Co., Los Angeles, Calif.
DoAll Co., The, Des Plaines, Ill.
Famco Machine Co., Racine, Wis.
Fenway Machine Co., Inc., Philadelphia, Pa.
Kling Bros. Engineering Works, Chicago, Ill.
National Machine Tool Co., Racine, Wis.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Parker Manufacturing Co., Santa Monica, Calif.
Peck, Stow & Wilcox Co., The, Southington, Conn.
Shobar Sales, Inc., Stockton, Calif.
Simonds Saw & Steel Co., Fitchburg, Mass.
Stanley Electric Tools, New Britain, Conn.
Thomas Machine Mfg. Co., Pittsburgh, Pa.
Wales-Strippit Corp., N. Tonawanda, N. Y.
Wallace Supplies Mfg Co., Chicago, Ill.
Webb Corp., The, Webb City, Mo.
Whiting Corp., Harvey, Ill.
Whitney, W. A., Mfg. Co., Rockford, Ill.

METAL-CUTTING SHEARS, Electric, Portable

Barth Mfg. Co., The, Milldale, Conn.
Billings and Spencer Co., The, Hartford, Conn.
Black & Decker Mfg. Co., The, Towson, Md.
Fenway Machine Co., Inc., Philadelphia, Pa.
Pennsylvania Salt Mfg. Co., Philadelphia, Pa.
Philadelphia Quartz Co., Philadelphia, Pa.
Phillips Mfg. Co., Chicago, Ill.
Quaker Chemical Prod. Corp., Conshohocken, Pa.
Solventol Chemical Products, Inc., Detroit, Mich.
Standard Research, Inc., New Haven 13, Conn.
Standard Supply Co., New Haven, Conn.
Techline Div., Wheelabrator Corp., Vicksburg, Mich.
Thermacote Co., Los Angeles, Calif.
Turco Products, Inc., Los Angeles, Calif.
Waverly Petroleum Products Co., Philadelphia, Pa.
Wayne Chemical Prod. Co., Detroit, Mich.
Wolfe-Kote Co., Sheboygan, Wis.
Wyandotte Chemicals Corp., Wyandotte, Mich.

LOngacre 1-7168

Independent Pneumatic Tool Co., Chicago, Ill.
Jefferson Engineering & Mfg. Co., Detroit, Mich.
Mid-States Welder Mfg. Co., Chicago, Ill.
Skil Corp., Chicago, Ill.
Stanley Electric Tools, New Britain, Conn.
Van Dorn Electric Tool Co., The, Towson, Md.

METAL-MARKING CRAYONS

(See: "Soapstone Crayons" and "Temperature-Indicating Crayons")

METALLIZING WIRE

Allegheny Ludlum Steel Corp., Brackenridge, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Chain & Cable Co., Inc., Page Steel Wire Div., Monessen, Pa.
American Welding Alloys, Corp., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Division Lead Co., Summit, Ill.
Farrelloy Co., Philadelphia, Pa.
Metallizing Co., of America, Chicago, Ill.
Metallizing Engineering Co., Inc., Long Island, N. Y.
North American Philips Co., Inc., Lewiston, Me.
Phosphor Bronze Corp., The, Seymour, Conn.
Reid-Avery Co., Baltimore, Md.
Spra Rod Corp., Cleveland, Ohio
Standard Steel & Wire Co., Bolivar, Pa.
United Wire & Supply Corp., Providence, R. I.
Wall Colmonoy Corp., Detroit, Mich.
Welding Alloys Mfg. Co., Newark, N. J.
Whitelight Wire & Supply, Brooklyn, N. Y.
Wickwide Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.
Youngstown Sheet & Tube Co., Youngstown, Ohio

METALLURGICAL APPARATUS

Bausch & Lomb Optical Co., Rochester, N. Y.
Buehler Ltd., Chicago, Ill.
Gordon Co., Claud S., Chicago, Ill.
Precision Scientific Co., Chicago, Ill.
Severn Engineering Co., Inc., Annapolis, Md.

METAL-SPRAYING EQUIPMENT

Binks Mfg. Co., Chicago, Ill.
Metallizing Engineering Co., Inc., Westburg, N. Y.
Metalspray Co., Inc., Los Angeles, Calif.
Powder Weld Process Co., The, Brooklyn, N. Y.
Wall Colmonoy Corp., Detroit, Mich.

MIG EQUIPMENT

(See Tig and Mig Categories)

MILD-STEEL ELECTRODES

Air Reduction Sales Co., New York, N. Y.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Allied Weld-Craft, Inc., Indianapolis, Ind.
American Brazing Alloys Co., Pelham, N. Y.
Champion Rivet Co., Cleveland, Ohio
Electric Arc, Inc., Newark, N. J.

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Lincoln Electric Co., The, Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
McKay Co., Pittsburgh, Pa.
Metal & Thermit Corp., Rahway, N. J.
National Cylinder Gas Div., Chicago, Ill.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Reid-Avery Co., Baltimore, Md.
Shober Inc., Stockton, Calif.
Smith, A. O., Corp., Milwaukee, Wis.
Westinghouse Electric Corp., Buffalo, N. Y.

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All-State Alloys Co., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
Burdett Oxygen Co., The, Cleveland, Ohio
Champion Rivet Co., Cleveland, Ohio
Eutectic Welding Alloys Co., Flushing, N. Y.
Linde Co., New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
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National Welding Equip. Co., San Francisco, Calif.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Page Steel & Wire Div., Amer. Chain & Cable Co., Inc., Monessen, Pa.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Reid-Avery Co., Baltimore, Md.
Shober Inc., Stockton, Calif.
Sight Feed Generator Co., West Alexandria, Ohio
Standard Steel & Wire Co., Bolivar, Pa.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Victor Equipment Co., San Francisco, Calif.

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Air Reduction Sales Co., New York, N. Y.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Welding Alloys Corp., Brooklyn, N. Y.
Arcos Corp., Philadelphia, Pa.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
International Nickel Co., Inc., The, New York, N. Y.
Marquette Mfg. Co., Minneapolis, Minn.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif
Permalatem Welding Alloys Inc., Red Bank, N. J.

MULTIPLE SPOT WELDERS

(See also "Portable Spot Welders" and "Spot Welders")

Acme Electric Welder Co., Los Angeles, Calif.
Acro Welder Mfg. Co., Milwaukee, Wis.
Agnew Electric Co., Milford, Mich.
Allied Welder Corp., Dearborn, Mich.
Alphil Spot Welder Mfg. Co., Brooklyn, N. Y.
Ames Spot Welder Co., Inc., Brooklyn, N. Y.
Banner Welder, Inc., Milwaukee, Wis.
Delta Welder Corp., Detroit, Mich.
Eisler Engineering Co., Inc., Newark, N. J.
Electric Arc, Inc., Newark, N. J.
Expert Welding Mach. Co., Detroit, Mich.
Federal Machine & Welder Co., The, Warren, Ohio
Federal Tool Engineering Co., Cedar Grove, N. J.
Goodrich Welding Equipment Corp., Hudsonville, Mich.
Hoffman, Robt. W. Co., Inc., Chicago, Ill.
Kirkhof Mfg. Corp., Grand Rapids, Mich.
Larkin Welder & Machine Corp., Brooklyn, N. Y.
Link Welder Corp., Detroit, Mich.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Multi-Hydromatic Welding & Mfg. Co., East Detroit, Mich.
National Elec. Welding Mach. Co., Bay City, Mich.
Peer, Inc., Benton Harbor, Mich.
Precision Welder & Flexopress Corp, Cincinnati, Ohio
Progressive Welder Sales Co., Detroit, Mich.
Resistance Welder Corp., Bay City, Mich.
Sciaky Bros., Chicago, Ill.
Stryco Mfg. Co., San Francisco, Calif.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Thomson Electric Welder Co., Lynn, Mass.
United Welder Corp., Detroit, Mich.
Unitek Corp., Pasadena, Calif.
Universal Welder Corp., Cleveland, Ohio
Universal Electric Sales Corp., Cleveland, Ohio
Vacuum Tube Products Co., Oceanside, Calif.
Weldex, Inc., Detroit, Mich.
Welding Machines Mfg. Co., Detroit, Mich.

NIBBLING MACHINES

Allison-Campbell Division of American Chain & Cable Co., Inc., West Bridgeport, Conn.
American Pullmax Co., Inc., Chicago, Ill.
Buckeye Tools Corp., Dayton, Ohio
Fenway Machine Co., Philadelphia, Pa.
Wales-Strippit Corp., N. Tonawanda, N. Y.

NICKEL ELECTRODES and NICKEL ALLOYS

American Brazing Alloys Co., Pelham, N. Y.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Hoskins Mfg. Co., Detroit, Mich.
Industrial Overlay Metals Inc., Eaton, Ohio
International Nickel Co., Inc., New York, N. Y.
Lincoln Electric Co., Cleveland, Ohio
McKay Co., Pittsburgh, Pa.
Metal & Thermit Corp., Rahway, N. J.
Revere Copper & Brass, Inc., New York, N. Y.
Superweld Corp., N. Hollywood, Calif.

NICKEL MANGANESE STEEL

Allied Tractor & Steel Prod. Corp., Cleveland, Ohio
American Manganese Steel Div., Chicago Heights, Ill.
Carnegie-Illinois Steel Corp., Div. U. S. Steel Corp., Pittsburgh, Pa.
Ford Steel Co., St. Louis, Mo.
Industrial Overlay Metals, Eaton, Ohio
Manganese Steel Forge Co., Philadelphia, Pa.
Republic Steel Corp., Cleveland, Ohio
Ryerson, J. T., & Son, Inc., Chicago, Ill.
Stulz-Sickles Co., Newark, N. J.

NICKEL AND NICKEL ALLOY WELDING RODS

Air Reduction Sales Co., New York, N. Y.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
American Chain & Cable Co., Inc., Page Steel & Wire Div., Monessen, Pa.
American Steel & Wire Co., Cleveland, Ohio
Arcos Corp., Philadelphia, Pa.
Chas Brass & Copper Co., Waterbury, Conn.
Coast Metals, Inc., Little Ferry, N. J.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
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ALLOY RODS COMPANY
alloy arc welding electrodes

ARCALOY BULLETIN WA10
STAINLESS STEEL ELECTRODES

ARCALOY TYPE	AWS CLASS.
ARCALOY 308 *	E-308
ARCALOY 308ELC *	E-308ELC
ARCALOY 309 *	E-309
ARCALOY 309Cb *	E-309Cb
ARCALOY 309Mo	E-309Mo
ARCALOY 310 *	E-310
ARCALOY 310Cb *	E-310Cb
ARCALOY 310Mo *	E-310Mo
ARCALOY 312 *	E-312
ARCALOY 316 *	E-316
ARCALOY 316ELC *	E-316ELC
ARCALOY 317 *	E-317
ARCALOY 318*	E-318
ARCALOY 330 *	E-330
ARCALOY 347 *	E-347
ARCALOY 349 *	NOT CLASS.
ARCALOY 410 *	E-410
ARCALOY 430 *	E-430
ARCALOY 442	NOT CLASS.
ARCALOY 446	NOT CLASS.
ARCALOY 502 LIME	E-502-15
ARCALOY 502 AC-DC	E-502-16
ARCALOY 505	NOT CLASS.
ARCALOY 15-60 *	NOT CLASS.
ARCALOY 20	NOT CLASS.

*Available in AC-DC or Lime Coatings

ATOM • ARC BULLETIN WA8
ALL POSITION IRON POWDER LOW HYDROGEN ELECTRODES

ATOM • ARC TYPE	AWS CLASS.
ATOM • ARC 7018	E-7018
ATOM • ARC 7018Mo	E-7018-A-1
ATOM • ARC 8018N	E-8018-C-2
ATOM • ARC 8018CM	E-8018-B-2
ATOM • ARC 9018CM	E-9018-B-3
ATOM • ARC 10018MM	E-10018-D-2
ATOM • ARC 12018NMV	E-12018-G
ATOM • ARC "T"	E-11018-G
ATOM • ARC 502	E-502-16

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METAL POWDER STAINLESS STEEL ELECTRODES

STAIN-ARC 18-8
STAIN-ARC 18-8Mo
STAIN-ARC 18-8Cb

TOOL-ARC BULLETIN WA6
TOOL AND DIE WELDING ELECTRODES

TOOL-ARC TYPE	HARDNESS
OIL HARDENING	58-60 Rc
WATER HARDENING	58-60 Rc
AIR HARDENING	58-60 Rc
HOT WORK	52-55 Rc
HIGH SPEED	62-62 Rc
WORK HARDENING	200 BRINELL work hardens to 380 BRINELL

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FOR WELDING BRONZE, BRASS, COPPER, AND DISSIMILAR METALS

NICKEL-ARC BULLETIN WA2
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Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Neptune, N. J.
Shober Inc., Stockton, Calif.
Sight Feed Generator Co., West Alexandria, Ohio
Smith, A. O., Corp., Milwaukee, Wis.
Standard Steel & Wire Co., Bolivar, Pa.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio

NICKEL MANGANESE ELECTRODES

Air Reduction Sales Co., New York, N. Y.
Allied Weld-Craft, Inc., Indianapolis, Ind.
Alloy Rods Co., York, Pa.
American Manganese Steel Div., Chicago Heights, Ill.
Champion Rivet Co., Cleveland, Ohio
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Ford Steel Co., St. Louis, Mo.
Harnischfeger Corp., Milwaukee, Wis.
Haynes Stellite Co., Kokomo, Ind.
Industrial Overlay Metals, Eaton, Ohio
McKay Co., Pittsburgh, Pa.
Mir-O-Col Alloy Co., Inc., Los Angeles, Calif.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Resisto-Loy Co., Grand Rapids, Mich.
Sight Feed Generator Co., West Alexandria, Ohio
Stoody Co., Whittier, Calif.
Stulz-Sickles Co., Newark, N. J.
Welding Service Sales, Inc., San Francisco, Calif.
Westinghouse Electric Corp., Buffalo, N. Y.

NICKEL-MANGANESE WELDING RODS

Adams Alloy Co., Wakita, Okla.
Air Reduction Sales Co., New York, N. Y.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Manganese Steel Div., Chicago Heights, Ill.
Champion Rivet Co., Cleveland, Ohio
Eutectic Welding Alloys Corp., Flushing, N. Y.
Hoskins Mfg. Co., Detroit, Mich.
Industrial Overlay Metals, Eaton, Ohio
Mir-O-Col Alloy Co., Inc., Los Angeles, Calif.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys Inc., Red Bank, N. J.
Sight Feed Generator Co., W. Alexandria, Ohio
Stulz-Sickles Co., Newark, N. J.
Victor Equipment Co., Los Angeles, Calif.

NITROGEN

Air Products, Inc., Allentown, Pa.
Balbach Co., The, Omaha, Neb.
Big Three Welding Equipment Co., Houston, Texas
Burdett Oxygen Co., The, Cleveland, Ohio
Cambridge Corp., Lowell, Mass.
Delta Oxygen Co., Memphis, Tenn.
Dye Oxygen Co., Inc., Phoenix, Ariz.
Gaspro Ltd., Honolulu, Hawaii
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.

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Heath Engineering Co., Ft. Collins, Colo.
Vogel Tool & Die Corp., Melrose Park, Ill.
Whitney, W. A., Mfg. Co., Rockford, Ill.

NUTS, Weld

(See: "Weld Nuts")

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Bausch & Lomb Optical Co., Rochester, N. Y.
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Kimball Safety Prod. Co., Cleveland, Ohio
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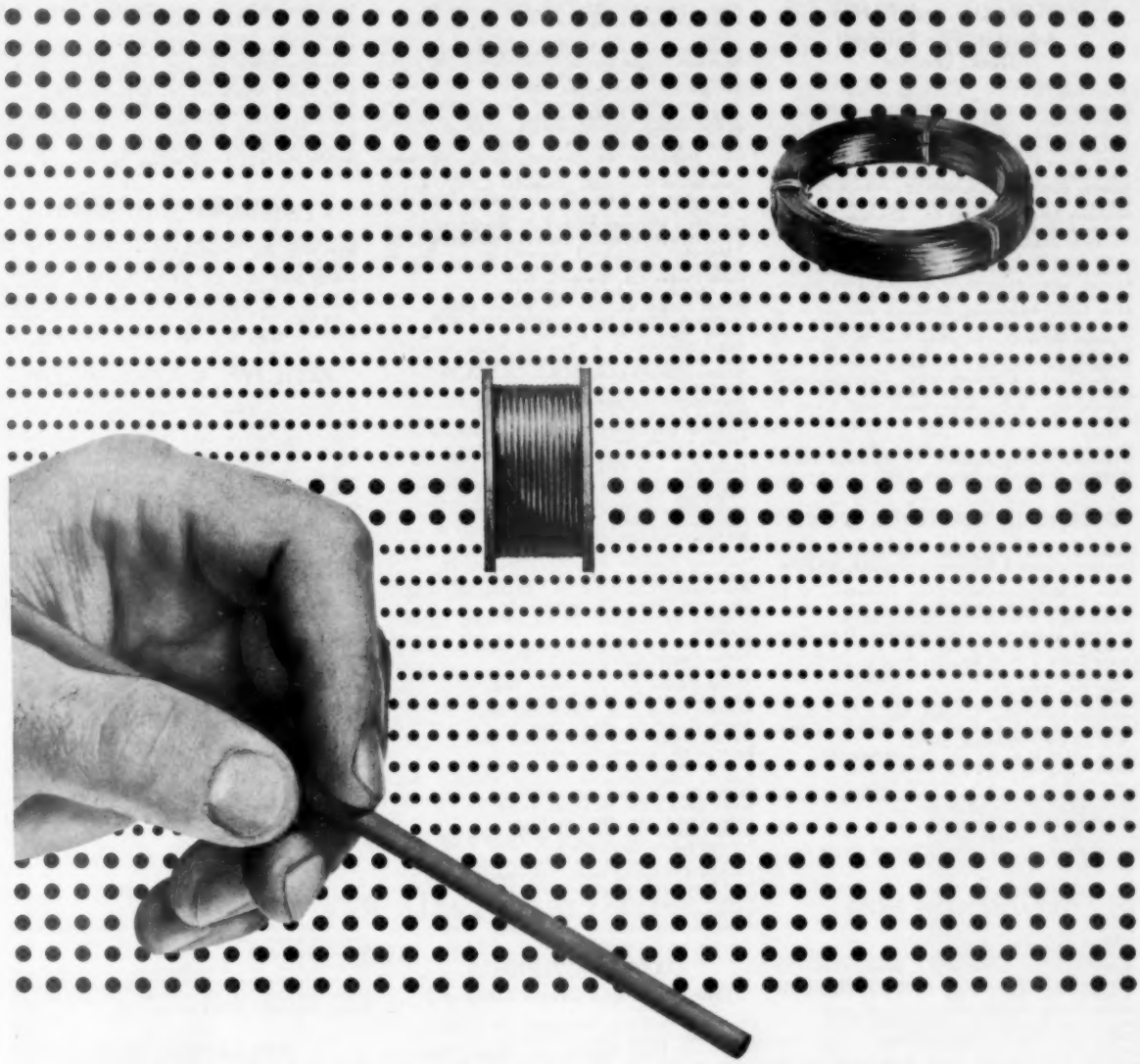

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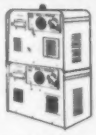

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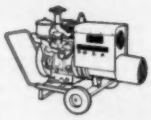

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Wheeler Protective Apparel, Inc., Chicago, Ill.
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Detroit Hoist & Mach. Co., Detroit, Mich.
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Ford Chain Block Div. of Amer. Chain & Cable Co., Inc., York, Pa.
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Gates Rubber Co., The, Denver, Colo.
Goodall Rubber Co., Philadelphia, Pa.
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Goodyear Tire & Rubber Co., Inc., Akron, Ohio
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Alaska Oxygen Co., Fairbanks, Alaska
Aldan Oxygen Mfg. Co., Inc., Collingdale, Pa.
American Compressed Gas Prods., Inc., Ft. Wayne, Ind.
American Gas & Chemical Co., Harrison, N. J.
American Oxygen Service Corp., Harrison, N. J.
Atlas Acetylene Co., Kearney, N. J.
Balbach Co., The, Omaha, Nebr.
Big Three Welding Equipment Co., Houston, Texas
Bird Gas Corp., Detroit, Mich.
Burdett Oxygen Co., The, Cleveland, Ohio
Buckeye Oxygen Co., Canton, Ohio
Cia. Productora De Oxigeno, S. A., Monterey, Mexico
Commercial Gas Corp., Wilkes-Barre, Pa.
Commonwealth Prods., Co. de Mexico, S. A. Mexico, D. F.
Compania Mexicana AGA, S. A., Mexico, D. F.
Compania Mexicana de Soldadura Autogena, S. A., Mexico
Corpus Christi Oxygen Co., Corpus Christi, Texas
Delta Oxygen Co., Memphis, Tenn.
Dye Oxygen Co., Inc., Phoenix, Ariz.
Denver Oxygen Co., Inc., The, Denver, Colo.
Thomas A. Edison, Inc., Stuyvesant Falls, N. Y.
Gases Agamex, S.A., Mexico
Gases Industries, S. A., San Luis Potosi, Mexico
Gulf Oxygen Co., Inc., Lake Charles, La.
Gaspro Ltd., Honolulu, T. H.
Houston Oxygen Co., Houston, Tex.
Independent Engineering Co., O'Fallon, Ill.
Indiana Oxygen Co., Indianapolis, Ind.
Industrial Air Products Co., Portland, Ore.
Kansas Oxygen, Inc., Hutchinson, Kan.
Keenan Welding Supplies Co., Albany, Ga.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Maine Industrial Gas Co., Lewiston, Me.
Maine Oxyacetylene Co., Auburn, Me.
Marks Oxygen Co., Augusta, Ga.
McDonald Co., B. F., Los Angeles, Calif.
National Cylinder Gas Div., Chicago, Ill.
National Welders Supply Co., Charlotte, N. C.
New England Gas Prods., Inc., Charlestown, Mass.
Oklahoma Oxygen Co., Tulsa, Okla.
Oxigeno de Tampico, S. A., Tampico, Tamps., Mexico
Pacific Acetylene Co., San Diego, Calif.
Pacific Oxygen Co., Oakland, Calif.
Puritan Compressed Gas Corp., Kansas City, Mo.
Sabine Oxygen Co., Port Arthur, Texas
Sierra Oxygen Co., Reno, Nevada
Southern Oxygen Co., Washington, D. C.
Steele Gases, Inc., Forest Park, Ill.
Stewart Oxygen Co., San Francisco, Calif.
Superior Air Products Co., Newark, N. J.
Superior Industrial Gas Corp., Astoria, N. Y.
Superior Oxyacetylene Machine Co., Hamilton, Ohio
Tex-Air Gas Co., Inc., Amarillo, Texas
Trinity Oxygen Co., Ft. Worth, Texas
Valley Oxygen Co., Bay City, Mich.
Valley Oxygen Co., Hanford, Calif.
Welders Supply Co., Little Rock, Ariz.
Welding Gas Products Co., Chattanooga, Tenn.
Welding & Industrial Prods., Ltd. Honolulu, T.H.
West Texas Oxygen Co., Lubbock, Tex.
Western Oxygen, Inc., Seattle, Wash.
Whitmore Oxygen Co., Salt Lake City, Utah
Wolverine Gas Products, Inc., Saginaw, Mich.

OXYGEN CYLINDERS
(See also "Liquid Oxygen Cylinders")

Harrisburg Steel Co., Harrisburg, Pa.
Independent Engrg. Co., O'Fallon, Ill.
Independent Metal Products Co., Omaha, Neb.
Kidde, Walter Co., Inc., Belleville, N. J.
Linde Co., New York, N. Y.
National Tube Co., Div. of U. S. Steel Corp., Pittsburgh, Pa.
Pressed Steel Tank Co., Milwaukee, Wis.

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Air Products, Inc., Allentown, Pa.
Independent Engineering Co., O'Fallon, Ill.
Joy Mfg. Co., Pittsburgh, Pa.
Sight Feed Generator Co., The, West Alexandria, Ohio
Superior Air Products Co., Newark, N. J.

OXYGEN MASKS

American Gas & Chemical Corp., Harrison, N. J.
Davis Emergency Equipment Co., Inc., Newark, N. J.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Mine Safety Appliances Co., Pittsburgh, Pa.
Nageldinger, J., & Son, Inc., New York, N. Y.
National Welding Equip. Co., San Francisco, Calif.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Puritan Compressed Gas Corp., Kansas City, Mo.
Safety First Supply Co., Pittsburgh, Pa.
Varkell, Paul, Co., New York, N. Y.

PAINT SPRAY MASKS

American Industrial Safety Equipment Co., Inc., Cleveland, Ohio
American Optical Co., Southbridge, Mass.
Boyer-Campbell Co., The, Detroit, Mich.
Chicago Eye Shield Co., Chicago, Ill.
Davis Emergency Equipment Co., Inc., Newark, N. J.
DeVilbiss Co., The, Toledo, Ohio
Flood Safety Products Co., Chicago, Ill.
General Scientific Equipment Co., Philadelphia, Pa.
Glendale Optical Co., Inc., Valley Stream, N. Y.
Industrial Products Co., Philadelphia, Pa.
Mine Safety Appliances Co., Pittsburgh, Pa.
Paasche Airbrush Co., Chicago, Ill.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Willson Products, Inc., Reading, Pa.

PAINT-SPRAY NOZZLES

Allen, W. D., Mfg. Co., Chicago, Ill.
Binks Mfg. Co., Chicago, Ill.
DeVilbiss Co., The, Toledo, Ohio
Elkhart Brass Mfg. Co., Elkhart, Ind.
Paasche Airbrush Co., Chicago, Ill.
Schrader's, A., Son, Division of Scovill Manufacturing Co., Inc., Brooklyn, N. Y.
Sherman, H. B., Mfg. Co., Battle Creek, Mich.

PASTE-TYPE BRAZING ALLOYS

Air Reduction Sales Co., New York, N. Y.
Allen, L. B. Co., Inc., Chicago, Ill.
Alloy Ring Service, Inc., Indianapolis, Ind.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Silver Co., Inc., Flushing, N. Y.
American Welding Alloys Corp., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Dalweld Co., Inc., Mt. Vernon, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farralloy Co., Philadelphia, Pa.
Fusion Engineering Co., Cleveland, Ohio
Goldsmith Bros. Smelting & Ref. Co., Chicago, Ill.
Handy & Harman, New York, N. Y.
Pacific Welding Alloys Corp., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Superweld Corp., N. Hollywood, Calif.

PIPE ALIGNMENT CLAMPS

Contour Marker Corp., Compton, Calif.
M. J. Crose Mfg. Co., Inc., Tulsa, Okla.
Line-O-Tool Co., Houston, Texas
C. A. Mathey Machine Works, Tulsa, Okla.
Pipe Line Development Co., Cleveland, Ohio

PIPE JAWS, for Vises

Armstrong Bros. Tool Co., Chicago, Ill.
Capewell Mfg. Co., The, Hartford, Conn.
Chicago Tool & Engineering Co., Chicago, Ill.
Columbian Vise & Mfg. Co., The, Cleveland, Ohio
Desmond-Stephan Mfg. Co., Urbana, Ohio
Grand Specialties Co., Chicago, Ill.
Hollands Mfg. Co., Erie, Pa.
Progressive Welder Co., Detroit, Mich.
Ridge Tool Co., The, Elyria, Ohio
Wilton Tool Mfg. Co., Chicago, Ill.

PIPE LAYOUT TOOL

Ayres Pipe Marker, Wilmington, Calif.
Contour Marker Corp., Compton, Calif.
Interstate Sales Co., New York, N. Y.
Lee, R. E., Long Beach, Calif.

PIPE-BENDING MACHINES

Baldwin-Lima-Hamilton Corp., Philadelphia, Pa.
Blackhawk Mfg. Co., Milwaukee, Wis.
Greenlee Tool Co., The, Rockford, Ill.
Hossfeld Mfg. Co., Winona, Minn.
Kling Bros. Engineering Works, Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Parker Appliance Co., The, Cleveland, Ohio
Pedrick Tool & Machine Co., Philadelphia, Pa.
Skinner, M. B., Co., South Bend, Ind.
Studebaker Machine Co., Maywood, Ill.
Tal Bending Equipment, Inc., Milwaukee, Wis.
Thomas Machine Mfg. Co., Pittsburgh, Pa.
Wallace Supplies Mfg. Co., Chicago, Ill.

PIPE-BEVELING MACHINES

Air Reduction Sales Co., New York, N. Y.
M. J. Crose Mfg. Co., Inc., Tulsa, Okla.
H & M Pipe Beveling Machine Co., Tulsa, Okla.
C. A. Mathey Machine Works, Inc., Tulsa, Okla.
Nickelson Tool & Die Co., Inc., Wichita, Kans.
Pandjiris Weldment Co., St. Louis, Mo.
Speedi-Burn Products Co., Inc., West Hempstead, N. Y.
Steffan Mfg. Corp., Salem, Ohio
Vernon Tool Co., Ltd., Alhambra, Calif.
Wallace Supplies Mfg. Co., Chicago, Ill.

PIPE-BEVELING TOOLS

Beaver Pipe Tools, Inc., Warren, Ohio
M. J. Crose Mfg. Co., Inc., Tulsa, Okla.
H & M Pipe Beveling Machine Co., Tulsa, Okla.
C. A. Mathey Machine Works, Tulsa, Okla.
Oster Mfg. Co., The, Cleveland, Ohio
Tri-Clover Machine Co., Kenosha, Wis.
Vogel Tool & Die Corp., Melrose Park, Ill.
Wallace Supplies Mfg. Co., Chicago, Ill.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.

PIPE-CUTTING MACHINES

Allison-Campbell Division, Am. Chain & Cable Co., Inc., Bridgeport, Conn.
American Electric Fusion Corp., Chicago, Ill.
American Pipe Tool Co., Chicago, Ill.
Armstrong Bros. Tool Co., Chicago, Ill.
Atkins, E. C., & Co., Indianapolis, Ind.
Beaver Pipe Tools, Inc., Warren, Ohio
Capewell Mfg. Co., The, Hartford, Conn.
M. J. Crose Mfg. Co., Inc., Tulsa, Okla.
Disston, Div., H. K. Porter Co., Inc., Philadelphia, Pa.
H & M Pipe Beveling Machine Co., Tulsa, Okla.
Heath Engrg. Co., Ft. Collins, Colo.
Herbrand Tools, Fremont, Ohio
Hollands Mfg. Co., Erie, Pa.
Imperial Brass Mfg. Co., The, Chicago, Ill.
Kling Bros. Engineering Works, Chicago, Ill.
C. A. Mathey Machine Works, Inc., Tulsa, Okla.
National Cylinder Gas Div., Chicago, Ill.
Nickelson Tool & Die Co., Inc., Wichita, Kans.
Nye Tool & Machine Co., Chicago, Ill.
Oster Manufacturing Co., The, Cleveland, Ohio
Pandjiris Weldment Co., St. Louis, Mo.
Parker Appliance Co., Inc., The, Cleveland, Ohio
Quijada Tool Co., Inc., Los Angeles, Calif.
Ridge Tool Co., The, Elyria, Ohio
Simonds Saw & Steel Co., Fitchburg, Mass.
Speedi-Burn Products Co., West Hempstead, N. Y.
Steffan Mfg. Corp., Salem, Ohio
Toledo Pipe Threading Machine Co., The, Toledo, Ohio
Trimont Mfg. Co., Div. of Aetna Industrial Corp., Roxbury, Mass.
Vernon Tool Co., Ltd., Alhambra, Calif.
Vogel Tool & Die Corp., Melrose Park, Ill.
Wallace Supplies Mfg. Co., Chicago, Ill.

PIPE DOLLIES

H & M Pipe Beveling Machine Co., Tulsa, Okla.
Oxo Welding Equipment Co., Inc., New Lenox, Ill.
Pandjiris Weldment Co., St. Louis, Mo.
Webb Corp., Webb City, Mo.

PIPING, Blow, Exhaust and Ventilating

Engwald Corp., Brooklyn, N. Y.
Flexaust Co., The, New York, N. Y.
Naylor Pipe Co., Chicago, Ill.
Paasche Airbrush Co., Chicago, Ill.
Schmieg Industries, Inc., Detroit, Mich.
Sprout Waldron & Co., Inc., Muncy, Pa.
Taylor Forge & Pipe Works, Chicago, Ill.
Victaulic Co. of America, Elizabeth, N. J.

PLANISHERS

(See "Roll Planishing")

PLASTIC COVER LENSES

American Industrial Safety Equipment Co., Inc., Cleveland, Ohio
Atlas Welding Accessories, Inc., Ferndale, Mich.
Burdett Oxygen Co., Cleveland, Ohio
Chicago Eye Shield Co., Chicago, Ill.
Dockson Corp., Detroit, Mich.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
Glendale Optical Co., Inc., Valley Stream, N. Y.
Homalite Corp., The, Wilmington, Del.
Kimball Safety Prod. Co., Cleveland, Ohio
Linde Co., New York, N. Y.
Mine Safety Appliances Co., Pittsburgh, Pa.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Oxo Welding Equipment Co., New Lenox, Ill.
Pulmosan Safety Equip. Co., Brooklyn, N. Y.
Sellstrom Mfg. Co., Palatine, Ill.
Thermacote Co., Pasadena, Calif.
United States Safety Service Co., Kansas City, Mo.
Watchemoket Optical Co., Inc., Providence, R. I.
Welding Alloy Mfg. Co., Newark, N. J.
Welsh Mfg. Co., Providence, R. I.
Wilkie Optical, Inc., Barrington, N. J.

PLASTIC WELDING EQUIPMENT

American Agile Corp., Bedford, Ohio
Laramy Products Co., Hingham, Mass.

PLATE LIFTING CLAMPS

Merrill Brothers, Maspeth, N. Y.
J. C. Renfroe & Sons, Inc., Jacksonville, Fla.

PLATES, Steel

(See: "Steel, Sheets, Plates, Bars, and Structural Shapes, Etc.")

PLIERS

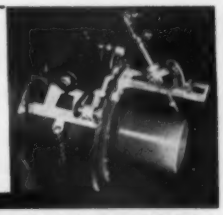
Atlas Welding Accessories Co., Ferndale, Mich.
Basford, H. R., Co., San Francisco, Calif.
Billings & Spencer Co., The, Hartford, Conn.
Blackhawk Mfg. Co., Milwaukee, Wis.
Bonny Forge & Tool Works, Allentown, Pa.
Bridgeport Hardware Mfg. Co., The, Bridgeport, Conn.
Champion DeArment Tools Co., Meadville, Pa.
Crescent Tool Co., Jamestown, N. Y.
Duro-Metal Products Co., Chicago, Ill.
Herbrand Tools, Fremont, Ohio
Klein, Mathias, & Sons, Chicago, Ill.
Kraeuter & Co., Inc., Newark, N. J.
Lapeer Mfg. Co., Detroit, Mich.
New Britain Machine Co., New Britain, Conn.
Owatonna Tool Co., Owatonna, Minn.
Park Metalware Co., Inc., Orchard Park, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Plomb Tool Co., Los Angeles, Calif.
Quality Tools Corp., New Wilmington, Pa.
Smith, Seymour & Son, Inc., Oakville, Conn.
Stevens Walden, Inc., Worcester, Mass.
Utica Drop Forge & Tool Corp., Utica, N. Y.

PLIERS, Toggle-Action

Atlas Welding Accessories Co., Ferndale, Mich.
Billings and Spencer Co., The, Hartford, Conn.
Detroit Stamping Co., Detroit, Mich.
Lapeer Mfg. Co., Detroit, Mich.
Owatonna Tool Co., Owatonna, Minn.
Petersen Mfg. Co., Inc., DeWitt, Neb.
West Point Mfg. Co., Detroit, Mich.

designed for profit . . .

The H&M Line means faster, easier pipe cutting & beveling



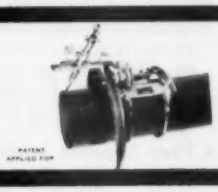
MOTORIZED UNIT provides fully automatic operation for H&M pipe cutting and beveling machines. Motors are built for consistent, smooth operation . . . steady power.

FLEXIBLE SHAFT . . . allows one man complete visibility when cutting pipe. Regulates speed of torch at all times. Attaches easily to any H&M Machine.

PIPE DOLLIES . . . for leveling, aligning and rolling pipe. Designed for safety, speed and accuracy in pipe fabrication. Reduces pipe handling time up to 85%.

BOXES . . . . . . specially designed to safeguard H&M Pipe Cutting and Beveling Machines. Special fitting holds the assembly firmly in place. Available for all sizes of H&M Machines.

HOOKS & CLAMPS



STANDARD MACHINES 1½" to 36"

The seven models of H&M Pipe Cutting and Beveling Machines are built to cut and bevel any size of pipe with ease, speed, economy and accuracy, under the toughest conditions, in the field or in the shop.

WRITE FOR ILLUSTRATED CATALOG SHEETS ON THE H&M ACCESSORY LINE.

H&M TM Reg

PIPE BEVELING MACHINE COMPANY
311 E. Third St. DI 3-0241
TULSA, OKLAHOMA

P&H Positioners – save time, improve welds, and cut costs!

Complete range of sizes to handle work ranging from 100 to 100,000 lbs.

P&H positioners end slow, costly, out-of-position welding. Many users report cost cuts of 50%. Here's why:

- **They speed welding** — permit down-hand welding with larger, hotter rods for faster deposition.
- **They cut handling costs** — no extra men, hoists, cranes required to rearrange weldment. The *only* positioner to give you vertical elevation under load—*the third motion.*
- **They improve work quality** — fillets and beads are smoother, neater, more uniform.
- **They increase safety** — eliminate hazards of handling heavy weldments. Table can't fall under load.

Call in your P&H representative. He can show you how P&H welding positioners can save you money in your plant. Write for free bulletins today.

HARNISCHFEGER

P&H WELDING DIVISION

4513 West National Avenue, Milwaukee 46, Wis.

PLOW POINTS, REPOINTS and PLOWSHARE RECLAIMING UNITS

Osmundson Spade Mfg. Co., Perry, Iowa
Wiese Plow Welding Co., Perry, Iowa

PLUGS and RECEPTACLES

Albert & J. M. Anderson Mfg. Co., Boston, Mass.
Appleton Electric Co., Chicago, Ill.
Clinch Mfg. Corp., Chicago, Ill.
Cutler-Hammer, Inc., Milwaukee, Wis.
Industrial Products Co., Philadelphia, Pa.
Jones Div., Howard B., Chicago, Ill.
Joy Mfg. Co., Pittsburgh, Pa.
Pyle-National Co., Chicago, Ill.
Stevens, C. H., & Co., Cornwall Bridge, Conn.
Westinghouse Electric Corp., Pittsburgh, Pa.

PNEUMATIC HOISTS

Anker Holth Division of Wellman Engineering Co., Port Huron, Mich.
Aro Equipment Corp., Bryan, Ohio
Chicago Pneumatic Tool Co., New York, N. Y.
Cleveland Crane & Engineering Co., Wickcliffe, Ohio
Curtis Pneumatic Machinery, Div. of Curtis Mfg. Co., St. Louis, Mo.
Detroit Hoist & Machine Co., Detroit, Mich.
Gardner-Denver Co., Quincy, Ill.
Ingersoll-Rand Co., New York, N. Y.
Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Div., Muskegon, Mich.
Keller Tool Co., Grand Haven, Mich.
Market Forge Co., Everett, Mass.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Northern Engineering Works, Detroit, Mich.
Platz Co., Inc., Detroit, Mich.

POLISHERS

Acme Mfg. Co., Detroit, Mich.
Aro Equipment Corp., Bryan, Ohio
Aronson Machine Co., Arcade, N. Y.
Black & Decker Mfg. Co., The, Towson, Md.
Buckeye Tools Corp., Dayton, Ohio
Buehler, Ltd., Chicago, Ill.
Chicago Pneumatic Tool Co., New York, N. Y.
Cummins-Chicago Corp., Chicago, Ill.
Cutter Machine Co. (Belt Driven), St. Louis, Mo.
Divine Brothers Co., Utica, N. Y.
Elliott Mfg. Co., Binghamton, N. Y.
Hammond Machinery Builders, Inc., Kalamazoo, Mich.
Hisey Wolf Machine Co., The, Cincinnati, Ohio
Merit Products, Inc., Culver City, Calif.
Miller Falls Co., Greenfield, Mass.
NuSteel Co., Chicago, Ill.
Pacific Hardware & Steel Co., Inc., San Jose, Calif.
Portable Electric Tools, Inc., Chicago, Ill.
Porter-Cable Machine Co., Syracuse, N. Y.
Rotor Tool Co., Cleveland, Ohio
Ryman Engineering Co., Ellwood City, Pa.
Skil Corp., Chicago, Ill.
Stow Manufacturing Co., Binghamton, N. Y.
Syntron Co., Homer City, Pa.
Thor Power Tool Co., Aurora, Ill.
United States Electric Tool Co., The, Cincinnati, Ohio
Wyzenbeek and Staff, Inc., Chicago, Ill.

PORTABLE AIR COMPRESSORS

Allis-Chalmers Manufacturing Co., Milwaukee, Wis.
Brunner Manufacturing Co., Utica, N. Y.
Chicago Pneumatic Tool Co., New York, N. Y.
DeVilbiss Co., The, Toledo, Ohio
Gardner-Denver Co., Quincy, Ill.
Independent Pneumatic Tool Co., Chicago, Ill.
Ingersoll-Rand Co., New York, N. Y.
Joy Mfg. Co., Pittsburgh, Pa.
Kellogg Division of The American Brake Shoe Co., Rochester, N. Y.
Paasche Airbrush Co., Chicago, Ill.
Roots-Connersville Blower Corp., Connersville, Ind.
Saylor-Beall Manufacturing Co., Lansing, Mich.
Schramm, Inc., West Chester, Pa.
Smith, Gordon & Co., Inc., Bowling Green, Ky.
Worthington Corp., Harrison, N. J.

PORTABLE CRANES

Chisholm Moore Hoist Corp., Tonawanda, N.
Conco Engineering Works, Mendota, Ill.
Downs Crane & Hoist Co., Los Angeles, Calif.
Ford Chain Block Div. of American Chain & Cable Co., Inc., York, Pa.
Grand Specialties Co., Chicago, Ill.
Harnischfeger Corp., Milwaukee, Wis.
Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Div., Muskegon, Mich.
Revolvator Co., North Bergen, N. J.
Round, David, & Son, Cleveland, Ohio
Shepard Niles Crane & Hoist Co., Montour Falls, N. Y.
Wright Hoist Div. of American Chain & Cable Co., Inc., York, Pa.
Yale & Towne Mfg. Co., The, Phila. Div., Philadelphia, Pa.

PORTABLE ELECTRIC SANDERS

Albertson & Co., Inc., Sioux City, Iowa.
Belmont Abrasives, Boston, Mass.
Black & Decker Mfg. Co., The, Towson, Md.
Bradford Machine Tool Co., Cincinnati, Ohio
Buckeye Tools Corp., Dayton, Ohio
Chicago Pneumatic Tool Co., New York, N. Y.
Cincinnati Electrical Tool Co., The, Cincinnati, Ohio
Clark, James, Jr., Electric Co., Louisville, Ky.
Duro Metal Products Co., Chicago, Ill.
Gardner-Denver Co., Quincy, Ill.
Millers Falls Co., Greenfield, Mass.
Milwaukee Electric Tool Corp., Milwaukee, Wis.
Portable Electric Tools, Inc., Chicago, Ill.
Porter-Cable Machine Co., Syracuse, N. Y.
Rotor Tool Co., Cleveland, Ohio
Skil Corp., Chicago, Ill.
Stanley Electric Tool Division, The Stanley Works, New Britain, Conn.
Sterling Tool Products Co., Chicago, Ill.
Stow Mfg. Co., Inc., Binghamton, N. Y.
Thor Power Tool Co., Chicago, Ill.
United States Electrical Tool Co., The, Cincinnati Ohio
Van Dorn Electric Tool Co., The, Towson, Md.
Wodack Electric Tool Corp., Chicago, Ill.

PORTABLE RESISTOR UNITS

Eisler Engineering Co., Inc., Newark, N. J.
Mullenbach Div., Worthington Corp., Los Angeles, Calif.
Ohmite Mfg. Co., Chicago, Ill.
Stevens, C. H., & Co., Cornwall Bridge, Conn.

PORTABLE SPOT WELDERS

Acme Electric Welder Co., Los Angeles, Calif.
Acro Welder Mfg. Co., Milwaukee, Wis.
Allied Welder Corp., Dearborn, Mich.
Alphil Spot Welder Mfg. Corp., Brooklyn, N. Y.
Ames Spot Welder Co., Inc., Brooklyn, N. Y.
Ampower Prod. Co., Oak Lawn, Ill.
Aro Spot Welders, Div. of Guthery Machine Tool Corp., Long Island City, N. Y.
Banner Welder, Inc., Milwaukee, Wis.
Birdsell Mfg. Co., Inc., Mountain View, Calif.
Delta Welder Corp., Detroit, Mich.
Duro-Dyne Corp., New Hyde Park, N. Y.
Eisler Engineering Co., Inc., Newark, N. J.
Electric Arc, Inc., Newark, N. J.
Federal Machine and Welder Co., Warren, Ohio
Federal Tool Engineering Co., Cedar Grove, N. J.
Gaston Power Tools, Inc., Harvey, Ill.
Goodrich Welding Equipment Corp., Hudsonville, Mich.
Hoffman, Robt. W. Co., Inc., Chicago, Ill.
Link Welder Corp., Detroit, Mich.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Merit Co., Chicago, Ill.
Mid-States Welder Mfg. Co., Chicago, Ill.
Miller Electric Mfg. Co., Appleton, Wis.
National Cylinder Gas Div., Chicago, Ill.
Precision Welder & Flexopress Corp., Cincinnati, Ohio
Progressive Welder Sales Co., Detroit, Mich.
Raytheon Mfg. Co., Waltham, Mass.
Resistance Welder Corp., Bay City, Mich.
Sciaky Bros., Inc., Chicago, Ill.
Seedorff, A. P., Bell, Calif.
Stryco Mfg. Co., San Francisco, Calif.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Unitek Corp., Pasadena, Calif.
Universal Electric Sales Corp., Cleveland, Ohio
Vacuum Tube Products Co., Oceanside, Calif.
Welding Machines Mfg. Co., Detroit, Mich.
Welding Service & Supplies Co., Cicero, Ill.

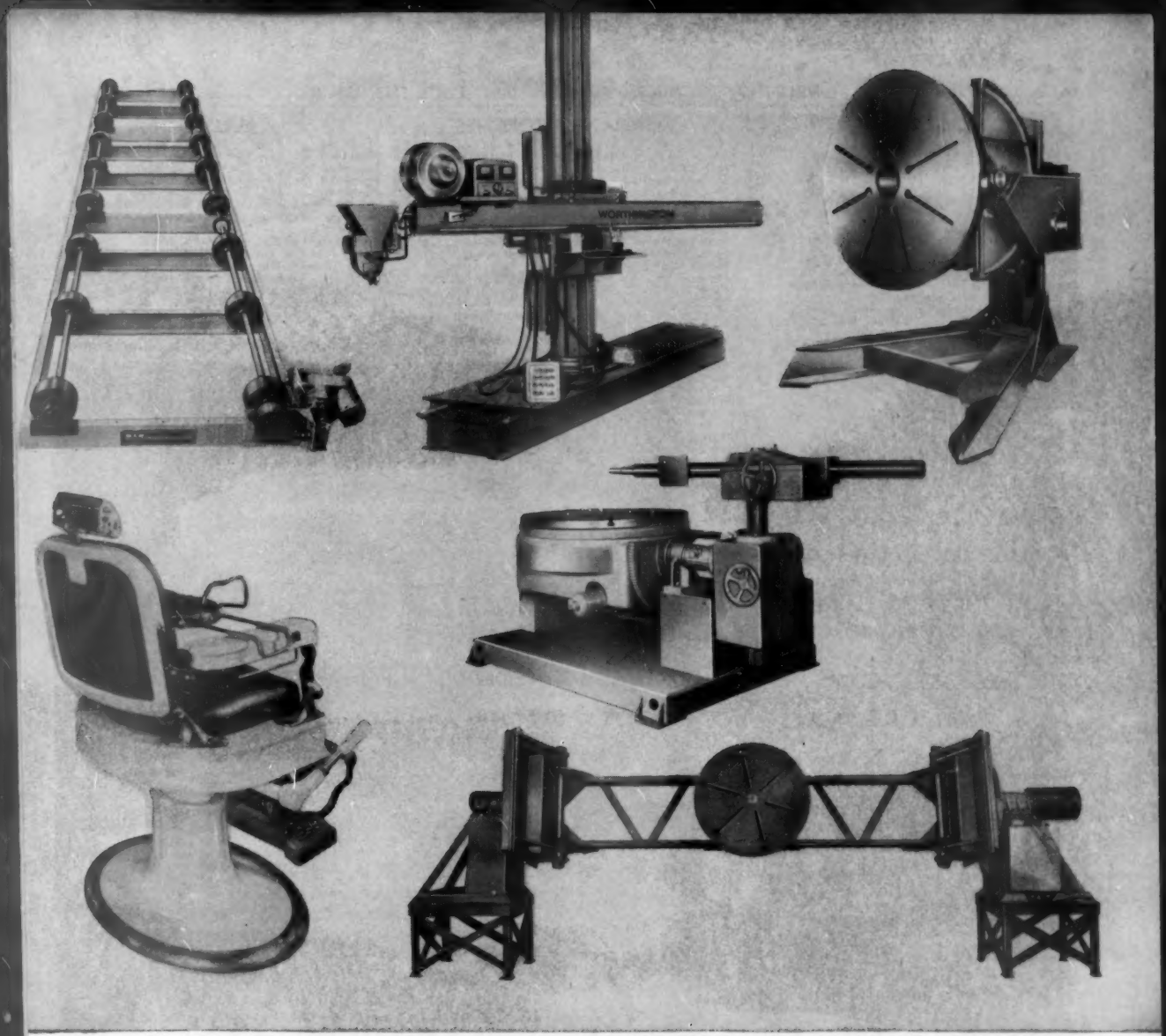
PORTABLE WELDING SHOPS

American Oxygen Service Corp., Harrison, N. J.
Couse Mfg. Co., Inc., Newark, N. J.
Hebard & Co., W. F., Chicago, Ill.
Hobart Bros. Co., Troy, Ohio
National Cylinder Gas Div., Chicago, Ill.
Progressive Welder Sales Co., Detroit, Mich.
Willys-Overland Motors, Inc., Toledo, Ohio

POSITIONERS

Acme Mfg. Co., Detroit, Mich.
Acro Welder Mfg. Co., Milwaukee, Wis.
Airline Welding and Engineering, Hawthorne, Calif.

(More positioner listings on page 66)



WHICH ONE OF THESE POSITIONERS DOESN'T WORTHINGTON MAKE?

Of course, Worthington doesn't make barber chairs. We really don't know anything about cutting hair . . . *but,* when it comes to positioning for welding, that's where we're right at home.

Whether you're talking about a small positioner for automatic welding of a sub-assembly, a 400-ton turning roll for a nuclear reactor, or a completely integrated push button package, Worthington is ready and able to serve you.

You owe it to yourself to investigate the profit-producing possibilities of positioning equipment—especially in these days of steadily rising labor costs and tight work scheduling. You get faster production, better and smoother welds, fewer accident hazards and less need for crane service. Every piece of Worthington positioning equipment is job-rated for extra capacity, easy installation, greater parts interchangeability and economical operation. And you can count on equally complete Worthington engineering service . . . before you buy, during installation, right through regular maintenance. Why not ask your nearest Worthington distributor or District Sales Office for more information on profitable positioning equipment. Worthington Corporation, Section 55-7, Plainfield, N. J. In Canada, Worthington (Canada) Ltd., Brantford, Ontario.

WORTHINGTON . . . FIRST IN POSITIONING FOR WELDING

WORTHINGTON

POSITIONERS

(Continued)

Aronson Machine Co., Arcade, N. Y.
Be-Co Engineering Co., Rosemead, Calif.
Bentley Weldery, Inc., Syracuse, N. Y.
Cayuga Machine & Fabr. Co., Inc., Depew, N. Y.
Cullen-Friestedt Co., Chicago, Ill.
Eisler Engineering Co., Inc., Newark, N. J.
Grand Specialties Co., Chicago, Ill.
Herrick, C. B., Mfg. Corp., Cleveland, Ohio
Harnischfeger Corp., Milwaukee, Wis.
Lewis Welding & Engrg. Corp., Bedford, Ohio
Miami Specialties Co., Troy, Ohio
Morton Mfg. Co., Muskegon Heights, Mich.
Pandjiris Weldment Co., St. Louis, Mo.
Peck, Cecil C., Co., Cleveland, Ohio
Raco Engineering Service, Alhambra, Calif.
Sciaky Bros., Inc., Chicago, Ill.
Superior Welding Co., Los Angeles, Calif.
Unique Equipment, Inc., Brooklyn, N. Y.
Webb Corp., Webb City, Mo.
Weldma Co., The, West Hartford, Conn.
Worthington Corp., Dunellen, N. J.

POTASSIUM SILICATE

du Pont de Nemours & Co., Inc., E. I., Grasselli Chemicals Dept., Wilmington, Del.
Pennsylvania Salt Mfg. Co., Philadelphia, Pa.
Philadelphia Quartz Co., Philadelphia, Pa.

POTS and KETTLES, Metal Melting

(See: "Ladles, Metal Melting, Pouring and Skimming")

POWDER-CUTTING TORCHES

Air Reduction Sales Co., New York, N. Y.
Linde Co., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.

POWDER-METAL ELECTRODES

Air Reduction Sales Co., New York, N. Y.
Alloy Rods Co., York, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Champion Rivet Co., Cleveland, Ohio
Eutectic Welding Alloys Corp., Flushing, N. Y.
Harnischfeger Corp., Milwaukee, Wis.
Hobart Bros. Co., Troy, Ohio
Industrial Overlay Metals, Eaton, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
McKay Co., The, Pittsburgh, Pa.
Metal & Thermit Corp., Rahway, N. J.
National Cylinder Gas Div., Chicago, Ill.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Reid-Avery Co., Baltimore, Md.
Smith, A. O., Corp., Milwaukee, Wis.
Westinghouse Electric Corp., Buffalo, N. Y.

POWDER-WELDING TORCHES

Coast Metals, Inc., Little Ferry, N. J.
Powder Weld Process Co., The, Brooklyn, N. Y.
Wall Colmonoy Corp., Detroit, Mich.

POWER HACK SAWS

American Saw & Mfg. Co., Springfield, Mass.
Armstrong-Blum Mfg. Co., Chicago, Ill.
Atkins, E. C., and Co., Indianapolis, Ind.
Atlas Welding Accessories Co., Ferndale, Mich.
Barnes, W. O., Co., Inc., Detroit, Mich.
Capewell Mfg. Co., The, Hartford, Conn.
Clemson Bros., Middletown, N. Y.
Disston Div., H. K. Porter Co., Philadelphia, Pa.
DoAll Co., The, Des Plaines, Ill.
Forsberg Mfg. Co., The, Bridgeport, Conn.
Griffin, G. W., Co., Franklin, N. H.
Millers Falls Co., Greenfield, Mass.
Simonds Saw and Steel Co., Fitchburg, Mass.
Skil Corp., Chicago, Ill.
Spartan Saw Works, Inc., Springfield, Mass.
Starrett, L. S., Co., The, Athol, Mass.
Thompson, Henry G., & Son Co., The, New Haven, Conn.
Victor Saw Works, Inc., Middletown, N. Y.
Wallace Supplies Mfg. Co., Chicago, Ill.

PREHEATING EQUIPMENT, Portable, Electric

Arcos Corp., Philadelphia, Pa.
Eclipse Fuel Engineering Co., Rockford, Ill.
Electric Arc, Inc., Newark, N. J.
Falcon Equipment Co., New Brighton, Pa.
Hobart Bros. Co., Troy, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Mahr Mfg. Co., Div. of Diamond Iron Works, Inc., Minneapolis, Minn.
National Tube Co., Div. of U. S. Steel Corp., Pittsburgh, Pa.
Pressed Steel Tank Co., Milwaukee, Wis.

PREHEATING TORCHES

Aeroil Products Co., Inc., South Hackensack, N. J.
Air Reduction Sales Co., New York, N. Y.
Bastian-Blessing Co., The, Chicago, Ill.
Clayton & Lambert Mfg. Co., Louisville, Ky.
Crattsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
Eclipse Fuel Engineering Co., Rockford, Ill.
Hammon Precision Equipment Co., Oakland, Calif.
Harris Calorific Co., The, Cleveland, Ohio
Hauck Mfg. Co., Brooklyn, N. Y.
Hones, Chas. A., Inc., Baldwin, L. I., N. Y.
Insto-Gas Corp., Detroit, Mich.
K-G Equipment Co., Inc., Allentown, Pa.
Johnson Gas Appliance Co., Cedar Rapids, Ia.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
MacLeod Co., The, Cincinnati, Ohio
Mahr Mfg. Co., Div. Diamond Iron Works, Minneapolis, Minn.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
National Welding Equip. Co., San Francisco, Calif.
Purity Cylinder Gases, Inc., Grand Rapids, Mich.
Ransome Co., Emeryville, Calif.
Smith Welding Equipment Corp., Minneapolis, Minn.
S-S Co., Brooklyn, N. Y.
Torit Mfg. Co., St. Paul, Minn.
Unique Mfg. Co., Inc., Chicago, Ill.
Victor Equipment Co., San Francisco, Calif.
Wemco Products, Hazel Park, Mich.
Weldit, Inc., Detroit, Mich.
Worcester Taper Pin Co., Worcester, Mass.

PRESSURE WELDERS, Oxyacetylene

(See: "Oxyacetylene Pressure Welders")

PROJECTION WELDERS

Acme Electric Welder Co., Los Angeles, Calif.
Acro Welder Mfg. Co., Milwaukee, Wis.
Agnew Electric Co., Milford, Mich.
Allied Welder Corp., Dearborn, Mich.
Alphil Spot Welder Mfg. Co., Brooklyn, N. Y.
Ames Spot Welder Co., Inc., Brooklyn, N. Y.
Banner Welder, Inc., Milwaukee, Wis.
Dalhart Eng. & Mfg. Co., Van Dyke, Mich.
Delta Welder Corp., Detroit, Mich.
Eisler Engineering Co., Newark, N. J.
Electric Arc, Inc., Newark, N. J.
Expert Welding Machine Co., Detroit, Mich.
Federal Mach. & Welder Co., The, Warren, Ohio
Goodrich Welding Equip. Corp., Hudsonville, Mich.
Larkin Welder & Machine Corp., Brooklyn, N. Y.
Link Welder Corp., Detroit, Mich.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Multi-Hydromatic Welding & Mfg. Co., East Detroit, Mich.
National Electric Welding Mach. Co., Bay City, Mich.
Peer, Inc., Benton Harbor, Mich.
Precision Welder & Flexopress Corp., Cincinnati, Ohio
Progressive Welder Sales Co., Detroit, Mich.
Resistance Welder Corp., Bay City, Mich.
Sciaky Bros., Inc., Chicago, Ill.
Stryco Mfg. Co., San Francisco, Calif.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Thomson Electric Welder Co., Lynn, Mass.
Topeka Foundry & Iron Works, Topeka, Kan.
Universal Electric Sales Corp., Cleveland, Ohio
Weldex, Inc., Detroit, Mich.
Welding Machines Mfg. Co., Detroit, Mich.
Weldit, Inc., Detroit, Mich.

PROJECTION WELDING DIES

Acme Electric Welder Co., Los Angeles, Calif.
Acro Welder Mfg. Co., Milwaukee, Wis.
Air Reduction Sales Co., New York, N. Y.
Allied Welder Corp., Dearborn, Mich.
Ampco Metal, Inc., Milwaukee, Wis.
Banner Welder Inc., Milwaukee, Wis.
Delta Welder Corp., Detroit, Mich.
Electroloy Co., Inc., Bridgeport, Conn.
Mallory, P. R., & Co., Inc., Indianapolis, Ind.
Peer, Inc., Benton Harbor, Mich.
Taylor-Winfield Corp., Warren, Ohio
Tipaloy, Inc., Detroit, Mich.
Tuffaloy Dept., Air Reduction Sales Co., Detroit, Mich.
Universal Electric Sales Corp., Cleveland, Ohio
WW Alloys, Inc., Div. of Fansteel Metallurgical Corp., Detroit, Mich.

PROPANE CYLINDERS

Compressed Gas Cylinders, Inc., Vernon, Calif.
Goss Gas, Inc., Glenshaw, Pa.
Harrisburg Steel Corp., Harrisburg, Pa.
Linde Co., New York, N. Y.
National Tube Co., Div. of U. S. Steel Corp., Pittsburgh, Pa.
Pressed Steel Tank Co., Milwaukee, Wis.

PULLERS

Blackhawk Mfg. Co., Milwaukee, Wis.
Columbus-McKinnon Chain Corp., Tonawanda, N. Y.
Herbrand Tools, Fremont, Ohio
Hewitt-Robins, Inc., Stamford, Conn.
Imperial Brass Mfg. Co., The, Chicago, Ill.
National Welding Equip. Co., San Francisco, Calif.
Owatonna Tool Co., Owatonna, Minn.
Plomb Tool Co., Los Angeles, Calif.
Sasgen Derrick Co., Chicago, Ill.
Templeton, Kenly & Co., Broadview, Ill.
Utica Drop Forge & Tool Corp., Utica, N. Y.
Williams, J. H., & Co., Buffalo, N. Y.

PUNCH and SHEARS, Combined

Alva Allen Industries, Clinton, Mo.
American Pullmax Co., Inc., Chicago, Ill.
Bateman Foundry & Machine Co., Mineral Wells, Texas
Kenco Mfg. Co., Los Angeles, Calif.
Kling Bros. Engineering Works, Chicago, Ill.
National Machine Tool Co., Racine, Wis.
Niagara Machine & Tool Works, Buffalo, N. Y.
Peck, Stow & Wilcox Co., Southington, Conn.
Webb Corp., The, Webb City, Mo.

PYROMETERS

Bristol Co., The, Waterbury, Conn.
Dillon, W. C., & Co., Inc., Van Nuys, Calif.
General Electric Co., Schenectady, N. Y.
Gordon, Claud S., Co., Chicago, Ill.
Industrial Overlay Metals, Eaton, Ohio
Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.
Pacific Transducer Corp., Los Angeles, Calif.
Richards, Arkley S., Co., Inc., Newton Highlands, Mass.
Weston Electrical Corp., Newark, N. J.

RADIOGRAPHIC FILM

Ansco, Binghamton, N. Y.
du Pont de Nemours, E. I. & Co., Wilmington, Del.
Eastman Kodak Co., X-ray Div., Rochester, N. Y.
Gevaert Co. of America, Inc., New York, N. Y.

RADIOGRAPHY

(See various categories of "Inspection Equipment")

RADIUM INSPECTION

(See also: "Inspection Equipment, Radium")

Bar-Ray Products, Inc., Brooklyn, N. Y.
Canadian Radium & Uranium Corp., New York, N. Y.
Kelley-Koett Mfg. Co., The, Covington, Ky.
St. John X-Ray Laboratories, Califon, N. J.

RAIL WELDING EQUIPMENT

Linde Co., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
Reade Mfg. Co., Inc., Jersey City, N. J.

RAILING MATERIALS

Braun, J. G., Co., Skokie, Ill.
Stewart Iron Works Co., Inc., Cincinnati, Ohio

RATCHET LEVER HOISTS

Chisholm-Moore Hoist Corp., Tonawanda, N. Y.
Coffing Hoist Co., Danville, Ill.
Columbus-McKinnon Chain Corp., Tonawanda, N. Y.
Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Division, Muskegon, Mich.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Sasgen Derrick Co., Chicago, Ill.

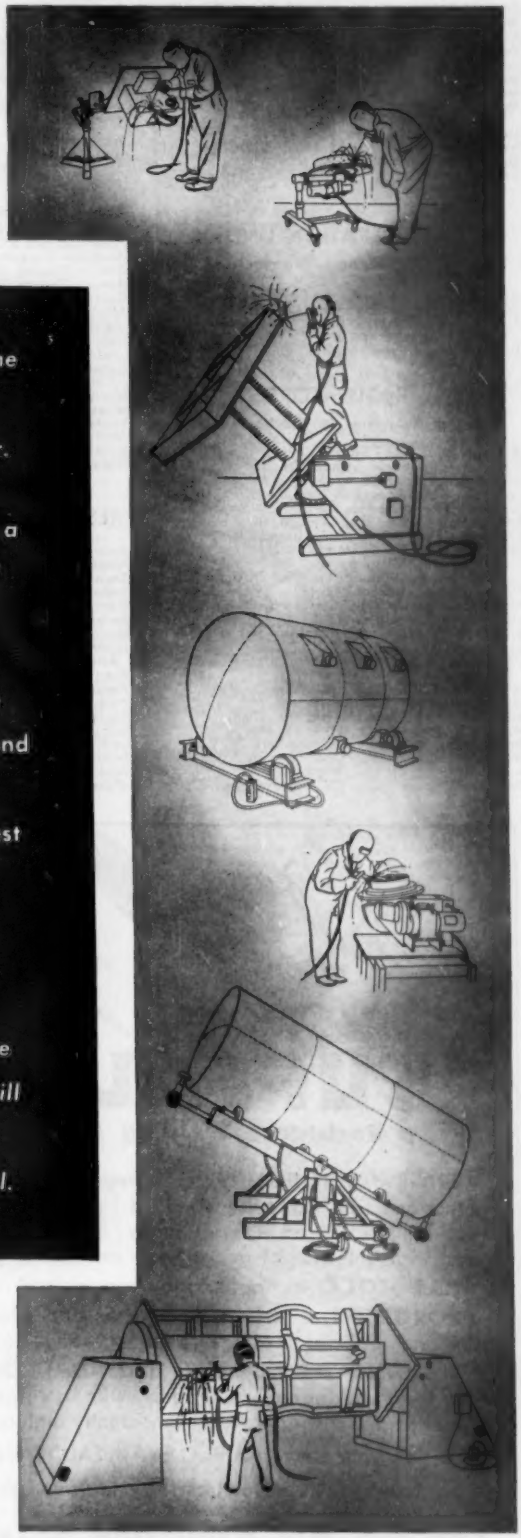
RECTIFIER ARC WELDERS

(See "Arc Welders, Rectifier")

REFRACTORIES

Armstrong Cork Co., Building Materials Div., Lancaster, Pa.
Bay State Abrasive Products Co., Westboro, Mass.
Botfield Refractories, Philadelphia, Pa.
Carborundum Co., The, Niagara Falls, N. Y.
Carey, Philip, Mfg. Co., The, Cincinnati, Ohio
Dixon, Joseph, Crucible Co., Jersey City, N. J.

POSITIONEERING *with* Aronson



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In a plain wall the stone is the chief cost; in a piece of classic statuary the cost of the stone is hardly reckoned.

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TURNTABLES
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ARCADE, NEW YORK

Ehret Magnesia Mfg. Co., Valley Forge, Pa.
Hercules Chemical Co., Inc., New York, N. Y.
Johns-Manville, New York, N. Y.
Keasbey & Mattison Co., Ambler, Pa.
Laclede-Christy Co., St. Louis, Mo.
Massillon Refractories Co., The, Massillon, Ohio
Mexico Refractories Co., Mexico, Mo.
National Carbon Div., Union Carbide Corp., New York, N. Y.
National Lead Co., New York, N. Y.
North American Refractories Co., Cleveland, Ohio
Quigley Co., Inc., New York, N. Y.
Titanium Alloy Mfg. Co., Div. National Lead Co., New York, N. Y.

REFRIGERATION UNITS
(Resistance Welder)

Airtemp Div., Chrysler Corp., Dayton, Ohio
Expert Welding Machine Co., Detroit, Mich.
Frostrode Div. Warren Alloys, Progressive Welder Sales Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio

REGULATORS
Oxygen, Acetylene and Carbon Dioxide

Acetogen Gas Co., Detroit, Mich.
Acetylene Supply Co., Linden, N. J.
Air Reduction Sales Co., New York, N. Y.
American Gas & Chemical Corp., Harrison, N. J.
American Oxygen Service Corp., Harrison, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Craftsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
Goss Gas Inc., Glenshaw, Pa.
Hammon Precision Equipment Co., Oakland, Calif.
Hannifin Corp., Des Plaines, Ill.
Harris Calorific Co., The, Cleveland, Ohio
Hoke, Inc., Cresskill, N. J.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Milburn, Alexander, Inc., Baltimore, Md.
Miles, John P. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
Nageldinger, J., & Son, Inc., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
National Welding Equip. Co., San Francisco, Calif.
Norgren, C. A. Co., Englewood, Colo.
Oxo Welding Equipment Co., New Lenox, Ill.
Paasche Airbrush Co., Chicago, Ill.
Smith Welding Equipment Corp., Minneapolis, Minn.
S-S Co., Brooklyn, N. Y.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.

REGULATOR and TORCH WRENCHES

Acetogen Gas Co., Detroit, Mich.
Air Reduction Sales Co., New York, N. Y.
American Gas & Chemical Corp., Harrison, N. J.
American Oxygen Service Corp., Harrison, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Burdett Oxygen Co., Cleveland, Ohio
Dockson Corp., Detroit, Mich.
Hammon Precision Equipment Co., Oakland, Calif.
Harris Calorific Co., The, Cleveland, Ohio
K-G Equipment Co., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Miles, John R. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
National Welding Equip. Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.

RESISTANCE-BRAZING MACHINES

Acro Welder Mfg. Co., Milwaukee, Wis.
American Electric Fusion Corp., Chicago, Ill.
Banner Welder, Inc., Milwaukee, Wis.
Eisler Engineering Co., Inc., Newark, N. J.
Electric Arc, Inc., Newark, N. J.
Federal Machine & Welder Co., Warren, Ohio
Goodrich Welding Equip. Corp., Hudsonville, Mich.
National Electric Welding Machines Co., Bay City, Mich.
Peer, Inc., Benton Harbor, Mich.
Precision Welder Mfg. Co., Chicago, Ill.
Progressive Welder Sales Co., Detroit, Mich.
Raytheon Mfg. Co., Waltham, Mass.
Sciaky Bros., Inc., Chicago, Ill.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Thomson Electric Welder Co., Lynn, Mass.
Weldex, Inc., Detroit, Mich.

RESISTANCE WELDERS
(See: "Butt and Flash Welders," "Gun Resistance Welders," etc.)

RESISTANCE-WELDING CABLE

Belden Mfg. Co., Chicago, Ill.
Collyer Insulated Wire Co., Pawtucket, R. I.
Delta Welder Corp., Detroit, Mich.
General Cable Corp., New York, N. Y.
Hazard Insulated Wire Works, Div. of the Okonite Co., Wilkes-Barre, Pa.
Okonite Co., Passaic, N. J.
Phelps Dodge Copper Products Corp., New York, N. Y.
Plastic Wire & Cable Corp., The, Jewitt City, Conn.
Rees, Mackworth, G., Detroit, Mich.
Roebling's Sons Co., John A., Trenton, N. J.
Rome Cable Corp., Rome, N. Y.
Simplex Wire & Cable Co., Cambridge, Mass.
Uniflex Cable Co., Detroit, Mich.
Universal Electric Sales Corp., Cleveland, Ohio
Western Insulated Wire Co., Los Angeles, Calif.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.

RESISTANCE-WELDING CONTROLS
(See also "Electronic Controls, Resistance-Welding," "Resistance-Welding Timers")

Acro Welder Mfg. Co., Milwaukee, Wis.
Alphil Spot Welder Mfg. Corp., Brooklyn, N. Y.
Clark Controller Co., The, Cleveland, Ohio
Cramer, R. W., Co., Inc., The, Centerbrook, Conn.
Eisler Engineering Co., Inc., Newark, N. J.
Electrical Controller & Mfg. Co., The, Cleveland, Ohio
General Electric Co. Specialty Control Dept., Waynesboro, Va.
Hoffman Robt. W. Co., Inc., Chicago, Ill.
Instrument Control Co., Minneapolis, Minn.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Metron Instrument Co., Denver, Colo.
Mullenbach Div., Worthington Corp., Los Angeles, Calif.
Photoswitch, Inc., Cambridge, Mass.
Photovolt Corp., New York, N. Y.
Raytheon Mfg. Co., Waltham, Mass.
Rees, Mackworth G., Inc., Detroit, Mich.
Robotron Corp., Detroit, Mich.
Square D Co., Milwaukee, Wis.
Taylor-Winfield Corp., Warren, Ohio
Vacuum Tube Products Co., Oceanside, Calif.
Weltronic Corp., Detroit, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.

RESISTANCE-WELDING ELECTRODES

Air Reduction Sales Co., New York, N. Y.
Alphil Spot Welder Mfg. Corp., Brooklyn, N. Y.
American Electric Fusion Corp., Chicago, Ill.
Ampco Metal, Inc., Milwaukee, Wis.
Beryllium Corp., Reading, Pa.
Cleveland Tungsten, Inc., Cleveland, Ohio
Electroloy Co., Inc., The, Bridgeport, Conn.
Hoffman, Robt W. Co., Inc., Chicago, Ill.
Mallory, P. R., & Co., Inc., Indianapolis, Ind.
Smith Bros., San Diego, Calif.
Tipaloy, Inc., Detroit, Mich.
Tuffaloy Dept., Air Reduction Sales Co., Detroit, Mich.
Weldaloy Products Co., Van Dyke, Mich.
WW Alloys, Inc., Div. of Fansteel Metallurgical Corp., Detroit, Mich.

RESISTANCE-WELDING TIMERS
(See also: "Resistance-Welding Controls," "Electronic Controls, Resistance-Welding")

Alphil Spot Welder Mfg. Corp., Brooklyn, N. Y.
Aro Spot Welders, Long Island City, N. Y.
Automatic Temperature Control Co., Philadelphia, Pa.
Clark Controller Co., The, Cleveland, Ohio
Cramer, R. W. Co., Inc., Centerbrook, Conn.
Eisler Engineering Co., Inc., Newark, N. J.
Electric Controller & Mfg. Co., The, Cleveland, Ohio
Electron Arc, Inc., Lynn, Mass.
Electronic Controls, Inc., Newark, N. J.
Electronic Products Co., N. Aurora, Ill.
Ferrara, Inc., Oak Park, Mich.
General Electric Co., Specialty Control Dept., Waynesboro, Va.
Hoffman, Robt. W. Co., Inc., Chicago, Ill.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Metron Instrument Co., Denver, Colo.
Mullenbach Div., Worthington Corp., Los Angeles, Calif.

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Photoswitch, Inc., Cambridge, Mass.
Photovolt Corp., New York, N. Y.
Raytheon Mfg. Co., Waltham, Mass.
Rees, Mackworth G., Inc., Detroit, Mich.
Robotron Corp., Detroit, Mich.
Ripley Co., Inc., Middletown, Conn.
Square D Co., Milwaukee, Wis.
Taylor-Winfield Corp., Warren, Ohio
Thermo Electric Mfg. Co., Dubuque, Iowa
Vangtronic Corp., The, Bridgeport, Conn.
Vacuum Tube Products Co., Oceanside, Calif.
Weltronic Co., Detroit, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.

RESISTANCE-WELDING TRANSFORMERS

Acme Electric Welder Co., Los Angeles, Calif.
Acro Welder Mfg. Co., Milwaukee, Wis.
Agnew Electric Co., Milford, Mich.
Allied Welder Corp., Dearborn, Mich.
American Electric Fusion Corp., Chicago, Ill.
American Transformer Co., Newark, N. J.
Ames Spot Welder Co., Inc., Brooklyn, N. Y.
Banner Welder, Inc., Milwaukee, Wis.
Birdsell Mfg. Co., Inc., Palo Alto, Calif.
Brennan, Bucci & Weber, Inc., New York, N. Y.
Cooper Welders, Inc., Morton Grove, Ill.
Eisler Engineering Co., Inc., Newark, N. J.
Electric Arc, Inc., Newark, N. J.
Electron Arc, Inc., Lynn, Mass.
Federal Machine & Welder Co., Warren, Ohio
Federal Tool Engineering Co., Cedar Grove, N. J.
Franklin Transformer Mfg. Co., Minneapolis, Minn.
General Electric Co., Schenectady, N. Y.
Goodrich Welding Equip. Corp., Hudsonville, Mich.
Gulow Corp., The, New York, N. Y.
Hercules Electric & Mfg. Co., Inc., Brooklyn, N. Y.
Hoffman, Robt. W. Co., Inc., Chicago, Ill.
Kirkhof Mfg. Corp., Grand Rapids, Mich.
Link Welder Corp., Detroit, Mich.
Marcus Transformer Co., Inc., Hillside, N. J.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Peer, Inc., Benton Harbor, Mich.
Precision Welder & Flexopress Corp., Cincinnati, Ohio
Progressive Welder Sales Co., Detroit, Mich.
Raytheon Mfg. Co., Waltham, Mass.
Resistance Welder Corp., Detroit, Mich.
Sciaky Bros., Chicago, Ill.
Stryco Mfg. Co., San Francisco, Calif.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Thomson Electric Welder Co., Lynn, Mass.
Universal Electric Sales Corp., Cleveland, Ohio
Universal Welder Corp., Cleveland, Ohio
Weldex, Inc., Detroit, Mich.
Welding Machines Mfg. Co., Detroit, Mich.

RESPIRATORS

American Industrial Safety Equipment Co., Inc., Cleveland, Ohio
American Optical Co., Southbridge, Mass.
Chicago Eye Shield Co., Chicago, Ill.
Davis Emergency Equipment Co., Inc., Newark, N. J.
DeVilbiss Co., The, Toledo, Ohio
Flexo Products, Inc., Westlake, Ohio
Flood Safety Products Co., Chicago, Ill.
General Scientific Equip. Co., Philadelphia, Pa.
Guyan Machinery Co., Logan, W. Virginia
Industrial Products Co., Philadelphia, Pa.
McDonald, B. F., Co., Los Angeles, Calif.
Mine Safety Appliances Co., Pittsburgh, Pa.
Nageldinger & Son, Inc., J., New York, N. Y.
Nutt, Buell W. Co., Los Angeles, Calif.
Paasche Airbrush Co., Chicago, Ill.
Pulmosan Safety Equipment Co., Cleveland, Ohio
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Sellstrom Mfg. Co., Palatine, Ill.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Willson Products, Inc., Reading, Pa.

RHEOSTATS

Clark Controller Co., The, Cleveland, Ohio
Cutler-Hammer, Inc., Milwaukee, Wis.
General Electric Co., Schenectady, N. Y.
Guyan Machine Co., Logan, W. Va.
Hobart Bros. Co., Troy, Ohio
Ohmite Manufacturing Co., Skokie, Ill.
Vulcan Electric Co., Danvers, Mass.

RINGS, Brazing Alloys

(See: "Brazing Alloy Rings")

RODS, Welding

(See: "Aluminum Rods, Brazing Rods, Bronze, Cast Iron, Etc.")

ROLLING SHUNTS

(See: "Resistance-Welding Cables")

ROLL PLANISHING

Airline Welding & Engineering, Hawthorne, Calif.
Pandjiris Weldment Co., The, St. Louis, Mo.

RUBBER ABRASIVES

Bay State Abrasive Products Co., Westboro, Mass.
Carborundum Co., The, Niagara Falls, N. Y.
Chicago Wheel & Mfg. Co., Chicago, Ill.
Desanno, A. P. & Son, Inc., Phoenixville, Pa.
Ideal Industries, Inc., Sycamore, Ill.
Raybestos-Manhattan, Inc., Passaic, N. J.
Sandusky Abrasive Wheel Co., Kalamazoo, Mich.
Weldon Roberts Rubber Co., Brightboy Industrial Div., Newark, N. J.

RUBBING and SHARPENING STONES

Bay State Abrasive Products Co., Westboro, Mass.
Carborundum Co., The, Niagara Falls, N. Y.
Chicago Wheel & Mfg. Co., Chicago, Ill.
Cortland Grinding Wheels Corp., Chester, Mass.
Macklin Co., Jackson, Mich.
Mid-West Abrasive Co., Owosso, Mich.
Sandusky Abrasive Wheel Co., Kalamazoo, Mich.
Universal Wheel & Abrasive Corp., Chicago, Ill.

RULES and TAPES

Atlas Welding Accessories Co., Ferndale, Mich.
Brown & Sharpe Mfg. Co., Providence, R. I.
Carlson Rules & Measures, Monrovia, Calif.
Evans Rule Co., Elizabeth, N. J.
Greene, Tweed & Co., North Wales, Pa.
Keuffel & Esser Co., Hoboken, N. J.
Lufkin Rule Co., The, Saginaw, Mich.
Master Rule Mfg. Co., Inc., White Plains, N. Y.
Millers Falls Co., Greenfield, Mass.
Niagara Machine & Tool Works, Buffalo, N. Y.
Stanley Electrical Tools, New Britain, Conn.
Starrett, E. S., Co., The, Athol, Mass.

RUST PREVENTIVES and REMOVERS

Allen, L. B., Co., Inc., Chicago, Ill.
Allied Products Co., Chicago, Ill.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Solder & Flux Co., Philadelphia, Pa.
Cabot, Samuel, Inc., Boston, Mass.
Carbide and Carbon Chemicals Div., Union Carbide Corp., New York, N. Y.
Cook's, Adam, Sons, Inc., Linden, N. J.
Dennis Chemical Co., St. Louis, Mo.
Diversey Corp., The, Chicago, Ill.
du Pont de Nemours, E. I. & Co., Inc., Wilmington, Del.
Eagle-Picher Sales Co., The, Cincinnati, Ohio
Eutectic Welding Alloys Corp., Flushing, N. Y.
Hercules Chemical Co., Inc., New York, N. Y.
Hollingshead, R. M., Corp., Camden, N. J.
Houghton, E. F., & Co., Philadelphia, Pa.
Kano Laboratories, Chicago, Ill.
Kelite Products, Inc., Los Angeles, Calif.
Klem Chemicals, Inc., Dearborn, Mich.
Krembs & Co., Chicago, Ill.
Metalloy Prod. Co., Los Angeles, Calif.
Miller, Harry Corp., Philadelphia, Pa.
Oakite Products, Inc., New York, N. Y.
Philadelphia Quartz Co., Philadelphia, Pa.
Presstite Engineering Co., St. Louis, Mo.
Quaker Chemical Products Corp., Conshohocken, Pa.
Quigley Co., Inc., New York, N. Y.
Rust-Oleum Corp., Evanston, Ill.
Smith, G. W., & Sons, Inc., Dayton, Ohio
Sonneborn Sons, Inc., L., New York, N. Y.
Standard Research, Inc., New Haven, Conn.
Stuart, D. A., Oil Co., Ltd., Chicago, Ill.
Sun Oil Co., Philadelphia, Pa.
Superior Flake Graphite Co., Chicago, Ill.
Techline Div., Wheelabrator Corp., Vicksburg, Mich.
Thompson & Co., Oakmont, Pa.
Turco Products, Inc., Los Angeles, Calif.
Wayne Chemical Products Co., Detroit, Mich.
Wilbur & Williams, Co., The, Boston, Mass.
Wolfe-Kote Co., Inc., Sheboygan, Wis.
Wyandotte Chemicals Corp., Wyandotte, Mich.

SAFETY SHOES

Davis Emergency Equipment Co., Inc., Newark, N. J.
Dunn Products, Chicago, Ill.
Greene, Tweed & Co., North Wales, Pa.
Industrial Products Co., Philadelphia, Pa.
International Shoe Co., St. Louis, Mo.
Lehigh Safety Shoe Co., Inc., Allentown, Pa.
Mine Safety Appliances Co., Pittsburgh, Pa.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety First Supply Co., Pittsburgh, Pa.
Thom McAn Safety Shoe Div., New York, N. Y.
Thompson Engineering Co., Grand Rapids, Mich.

SALT TABLETS and DISPENSERS

Bullard, E. D. Co., Sausalito, Calif.
Davis Emergency Equipment Co., Inc., Newark, N. J.
General Scientific Equip. Co., Philadelphia, Pa.
Industrial Products Co., Philadelphia, Pa.
International Salt Co., Inc., Scranton, Pa.
Halperin, A. E. Co., Inc., Boston, Mass.
McDonald, B. F., Co., Los Angeles, Calif.
Mine Safety Appliances Co., Pittsburgh, Pa.
Morton Salt Co., Chicago, Ill.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Safety Clothing & Equip. Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Standard Safety Equip. Co., Chicago, Ill.
United States Safety Service Co., Kansas City, Mo.

SANDBLAST ABRASIVES

Bay State Abrasive Products Co., Westboro, Mass.
Carborundum Co., The, Niagara Falls, N. Y.
Clayton-Sherman Abrasive Co., Detroit, Mich.
Clementina, Ltd., San Francisco, Calif.
Macklin Co., Jackson, Mich.
Metallizing Co. of America, Inc., Chicago, Ill.
Metallizing Engineering Co., Long Island City, N. Y.
Paasche Airbrush Co., Chicago, Ill.
Pangborn Corp., Hagerstown, Md.
Parsons Engineering Corp., Cleveland, Ohio
Ruemelin Mfg. Co., Milwaukee, Wis.
Turco Products, Inc., Los Angeles, Calif.
Vacu-Blast Co., Inc., Belmont, Calif.
Wheelabrator Corp., Mishawaka, Ind.

SANDBLAST EQUIPMENT

(See: "Sandblast Machines")

SANDBLAST HOSE

Boston Woven Hose & Rubber Co., Boston, Mass.
Brennan, Bucci & Weber, Inc., New York, N. Y.
Chicago Metal Hose Corp., Maywood, Ill.
Clementina, Ltd., San Francisco, Calif.
Diamond Mechanical Goods Div., B. F. Goodrich Co., Akron, Ohio
Gates Rubber Co., The, Denver, Colo.
Goodall Rubber Co., Philadelphia, Pa.
Goodrich, B. F., Co., The, Akron, Ohio
Goodyear Tire & Ruber Co., Inc., Akron, Ohio
Hewitt Rubber Div., Hewitt-Robins, Inc., Buffalo, N. Y.
Home Rubber Co., Trenton, N. J.
MacLeod Co., The, Cincinnati, Ohio
New York Belting & Packing Co., Passaic, N. J.
Pangborn Corp., Hagerstown, Md.
Quaker Rubber Corp., Philadelphia, Pa.
Raybestos-Manhattan, Inc., Passaic, N. J.
Republic Rubber Div., Lee Rubber & Tire Corp., Youngstown, Ohio
Ruemelin Mfg. Co., Milwaukee, Wis.

SANDBLAST MACHINES

Brennan, Bucci & Weber, Inc., New York, N. Y.
Clementina Ltd., San Francisco, Calif.
MacLeod Co., The, Cincinnati, Ohio
Pangborn Corp., Hagerstown, Md.
Ruemelin Mfg. Co., Milwaukee, Wis.
Vacu-Blast Co., Inc., Belmont, Cal.
Wheelabrator Corp., Mishawaka, Ind.

SANDBLAST NOZZLES

Clementina Ltd., San Francisco, Calif.
Diamonite Prod. Mfg. Co., Shreve, Ohio
MacLeod Co., The, Cincinnati, Ohio
Norton Co., The, Cincinnati, Ohio
Pangborn Corp., Hagerstown, Md.
Purnell Alloy Co., Angleton, Texas
Quaker Rubber Corp., Philadelphia, Pa.
Ruemelin Mfg. Co., Milwaukee, Wis.
Stoody Co., Whittier, Calif.
Vacu-Blast Co., Inc., Belmont, Calif.
Wheelabrator Corp., Mishawaka, Ind.

SANDPAPER

Abrasive Products, Inc., South Braintree, Mass.
Armour & Co., Alliance, Ohio
Atlas Abrasive Corp., Brooklyn, N. Y.
Behr-Manning Corp., Troy, N. Y.
Belmont Abrasives, Boston, Mass.
Carborundum Co., The, Niagara Falls, N. Y.
Hoffman, R. W., Co., Inc., Chicago, Ill.
Michigan Abrasive Co., Detroit, Mich.
Mid-West Abrasive Co., Owosso, Mich.
Minnesota Mining & Mfg. Co., St. Paul, Minn.
Norton Co., Worcester, Mass.
Raybestos-Manhattan, Inc., Passaic, N. J.
Simonds Abrasive Co., Philadelphia, Pa.

SCREENS

(See: "Welding Screens")

SEAM WELDERS

Acme Electric Welder Co., Los Angeles, Calif.
Acro Welder Mfg. Co., Milwaukee, Wis.
Agnew Electric Co., Milford, Mich.
Allied Welder Corp., Dearborn, Mich.
Alphil Spot Welder Mfg. Co., Brooklyn, N. Y.
American Electric Fusion Corp., Chicago, Ill.
Ames Spot Welder Co., Inc., Brooklyn, N. Y.
Banner Welder, Inc., Milwaukee, Wis.
Delta Welder Corp., Detroit, Mich.
Eisler Engineering Co., Newark, N. J.
Expert Welding Machine Co., Detroit, Mich.
Federal Mach. & Welder Co., The, Warren, Ohio
Goodrich Welding Equip. Corp., Hudsonville, Mich.
Kirkhof Mfg. Corp., Grand Rapids, Mich.
Larkin Welder & Machine Corp., Brooklyn, N. Y.
Link Welder Corp., Detroit, Mich.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Multi-Hydromatic Welding & Mfg. Co., East Detroit, Mich.
National Elec. Welding Mach., Co., Bay City, Mich.
Niagara Machine & Tool Works, Buffalo, N. Y.
Ohio Crankshaft Co., The, Tocco Div., Cleveland, Ohio
Peer, Inc., Benton Harbor, Mich.
Penn Tool & Machine Co., Danville, Ill.
Precision Welder & Flexopress Corp., Cincinnati, Ohio
Progressive Welder Sales Co., Detroit, Mich.
Resistance Welder Co., Bay City, Mich.
Sciaky Bros., Inc., Chicago, Ill.
Sight Feed Generator Co., West Alexandria, Ohio
Stryco Mfg. Co., San Francisco, Calif.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Thomson Electric Welder Co., Lynn, Mass.
United Welder Corp., Detroit, Mich.
Universal Electric Sales Corp., Cleveland, Ohio
Universal Welder Corp., Cleveland, Ohio
Vacuum Tube Products Co., Oceanside, Calif.
Victory Engineering & Machine Works, Inc., St. Louis, Mo.
Weldex, Inc., Detroit, Mich.
Welding Machines Mfg. Co., Detroit, Mich.

SEAM WELDING WHEELS

Acme Electric Welder Corp., Los Angeles, Corp.
Air Reduction Sales Co., New York, N. Y.
American Electric Fusion Corp., Chicago, Ill.
Ampco Metal, Inc., Milwaukee, Wis.
Banner Welder, Inc., Milwaukee, Wis.
Delta Welder Corp., Detroit, Mich.
Electroloy Co., The, Inc., Bridgeport, Conn.
Mallory, P. R., & Co., Inc., Indianapolis, Ind.
Tipaloy, Inc., Detroit, Mich.
Tuffaloy Dept., Air Reduction Sales Co., Detroit, Mich.
Weldaloy Products Co., Van Dyke, Mich.
WW Alloys, Inc., Div. of Fansteel Metallurgical Corp., Detroit, Mich.

SELENIUM RECTIFIERS

Bogue Electric Mfg. Co., Paterson, N. J.
Federal Telephone & Radio Corp., Clifton, N. J.
Hobart Bros. Co., Troy, Ohio
International Rectifier Corp., El Segundo, Calif.
Metal & Thermit Corp., Rahway, N. J.
Miller Electric Mfg. Co., Inc., Appleton, Wis.
Vickers Electric Div., St. Louis, Mo.
Westinghouse Electric Corp., Pittsburgh, Pa.

SELF-PROPELLED WELDER

Caterpillar Tractor Co., Peoria, Ill.
Hebard, W. F., & Co., Chicago, Ill.
Hobart Bros. Co., Troy, Ohio
Lincoln Electric Co., Cleveland, Ohio
Parsons, A. J., Washington, Pa.
Schramm, Inc., West Chester, Pa.

SEMIAUTOMATIC ARC WELDERS

(See "Arc Welders, Semiautomatic")

SHEARS, Metal Cutting, Foot Power, Belts or Motor Drives

(See: "Metal-Cutting Machines")

SHEARS, Metal Cutting, Pneumatic, Portable

(See also: "Metal-Cutting Machines")

Buckeye Tools Corp., Dayton, Ohio
Cleveland Crane & Engineering Co., Wickliffe, Ohio
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Porter, H. K., Inc., Somerville, Mass.

SHEARS, Metal Cutting, Rotary

(See: "Metal-Cutting Machines")

SHUNTS

(See: "Resistance-Welding Cables")

SKIN CREAM, Cleansing and Protective

Boyer-Campbell Co., The, Detroit, Mich.
Cadet Creme Sales Co., Springfield, Mass.
Davis Emergency Equipment Co., Inc., Newark, N. J.
Dennis Chemical Co., St. Louis, Mo.
Dunn Products, Chicago, Ill.
du Pont de Nemours E. I. & Co., Inc., Wilmington, Del.
Halperin, A. E. Co., Inc., Boston, Mass.
Industrial Products Co., Philadelphia, Pa.
Milburn Co., Detroit, Mich.
Mine Safety Appliances Co., Pittsburgh, Pa.
Permolatem Welding Alloys, Inc., Redbank, N. J.
Pulmosan Safety Equip. Corp., Brooklyn, N. Y.
Safety Clothing & Equipment Co., Cleveland, Ohio

SLEDGES, Mauls or Striking Hammers

(See: "Blacksmiths' Hammers")

SLEEVES, Asbestos, Fire-Resistant Duck, and Leather

A & A Mfg. Co., Milwaukee, Wis.
Advance Glove Mfg. Co., Detroit, Mich.
Aljay Mfg. Co., Inc., Philadelphia, Pa.
American Optical Co., Southbridge, Mass.
Associated Bag & Apron Co., Chicago, Ill.
Boyer-Campbell Co., The, Detroit, Mich.
Bullard, E. D., Co., San Francisco, Calif.
C. R. Daniels, Inc., Baltimore, Md.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Flood Safety Products Co., Chicago, Ill.
Frommelt Industries, Dubuque, Ia.
General Scientific Equipment Co., Philadelphia, Pa.
Genter, C. D., Co., Chattanooga, Tenn.
Holcomb Safety Garment Co., Chicago, Ill.
Industrial Gloves Co., Danville, Ill.
Industrial Products Co., Philadelphia, Pa.
Kimball Safety Prod. Co., Cleveland, Ohio
McDonald, B. F., Co., Los Angeles, Calif.
Mine Safety Appliances Co., Pittsburgh, Pa.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Olympic Glove Co. Inc., The, New York, N. Y.
Pulmosan Safety Equip. Corp., Brooklyn, N. Y.
Raybestos-Manhattan, Inc., Passaic, N. J.
Safety Clothing & Equipment Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Singer Glove Mfg. Co., Chicago, Ill.
Standard Safety Equipment Co., Chicago, Ill.
Streichert, E. J., Chicago, Ill.
Tillman John & Co. Long Beach, Calif.
Twentieth Century Glove Corp. of Texas, Atlanta Texas
Universal Leather Co., Inc. Berlin, Wis.
Wheeler Protective Apparel Inc. Chicago, Ill.

SOAPSTONE CRAYONS

American Crayon Co., Sandusky, Ohio
Atlas Welding Accessories Co., Ferndale, Mich.
Eastern Magnesia Talc Co., Burlington, Vt.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Georgia Talc Co., Chatsworth, Ga.
Randall Mfg. Co., Kansas City, Mo.
Markal Co., Chicago, Ill.
Whittaker, Clark & Daniels, Inc., New York, N. Y.

SOAPSTONE HOLDERS

Aladdin Rod & Flux Mfg. Co., Grand Rapids, Mich.
Atlas Welding Accessories, Inc., Ferndale, Mich.
Duramic Products, Inc., New York, N. Y.
Lenco, Inc., Jackson, Mo.
Ragle Industries, Kansas City, Mo.
Randall Mfg. Co., North Kansas City, Mo.
Whittaker, Clark & Daniels, Inc., New York, N. Y.

SODIUM SILICATE

American Chemical & Flux Co., Brooklyn, N. Y.
Diamond Alkali Co., Pittsburgh, Pa.
E. I. duPont deNemours & Co., Inc., Grasselli Chemicals Dept., Wilmington, Del.
Pennsylvania Salt Mfg. Co., Philadelphia, Pa.
Philadelphia Quartz Co., Philadelphia, Pa.

SOLDER PADDLES

Division Lead Co., Summit, Ill.
Porter, H. K., Inc., Somerville, Mass.

SOLDERS, Silver, Brazing and Hard

(See: "Brazing Alloys")

SOLDERING FLUX—Paste, Stick and Liquid

Aladdin Rod & Flux Mfg. Co., Grand Rapids, Mich.
Allen, L. B., Co., Inc., Chicago, Ill.
Alloy Ring Service, Inc., Indianapolis, Ind.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Alpha Metals, Inc., Brooklyn, N. Y.
Aluminum Co. of America, Pittsburgh, Pa.
American Brazing Alloys Co., Pelham, N. Y.
American Silver Co., Inc., Flushing, N. Y.
American Solder & Flux Co., Philadelphia, Pa.
American Welding Alloys Corp., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Burdett Oxygen Co., Cleveland, Ohio
Chase Brass & Copper Co., Waterbury, Conn.
Dalweld Co., Mt. Vernon, N. Y.
Division Lead Co., Summit, Ill.
du Pont, E. I., de Nemours & Co., Inc., Wilmington, Del.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farraloy Co., Philadelphia, Pa.
Fusion Engineering Co., Cleveland, Ohio
Gasflux Co., Mansfield, Ohio
Hercules Chemical Co., Inc., New York, N. Y.
Johnson Mfg. Co., Inc., Mount Vernon, Iowa
Kester Solder Co., Chicago, Ill.
Kirk, Morris P., & Son, Inc., Los Angeles, Calif.
Klem Chemicals, Inc., Dearborn, Mich.
Krembs & Co., Chicago, Ill.
Lake Chemical Co., Chicago, Ill.
Makepeace, D. E., Co., Attleboro, Mass.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Lead Co., New York, N. Y.
Ohio Carbon Co., The, Cleveland, Ohio
Permolatem Welding Alloys, Inc., Red Bank, N. J.
Puritan Compressed Gas Corp., Kansas City, Mo.
Ruby Chemical Co., The, Columbus, Ohio (Paste & Liquid only).
Sight Feed Generator Co., West Alexandria, Ohio
Special Chemicals Corp., Ossining, N. Y.
Superior Flux & Mfg. Co., Cleveland, Ohio
Swiss Laboratory, Cleveland, Ohio
Tweco Products, Inc., Wichita, Kan.
Wayne Chemical Products Co., Detroit, Mich.
Wolfe Kote Co., Inc., Sheboygan, Wis.
York Engineering Co., Chicago, Ill.

SOLDERING GUNS

Eisler Engineering Co., Inc., Newark, N. J.
Velocity Power Tool Co., Pittsburgh, Pa.
Weller Electric Corp., Easton, Pa.

SOLDERING IRON HANDLES

Bernz, Otto Co., Inc., Rochester, N. Y.
Imperial Brass Mfg. Co., The, Chicago, Ill.
Link, O. P., Handle Co., Salem, Ind.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Lutz File & Tool Co., Cincinnati, Ohio
Peck, Stow & Wilcox Co., Southington, Conn.
Sight Feed Generator Co., The, W. Alexandria, Ohio

SOLDERING IRONS

Acoustica Associates, Inc., Mineola, N. Y.
Bernz, Otto Co., Inc., Rochester, N. Y.
Century Aircraft, Los Angeles, Calif.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Dockson Corp., Detroit, Mich.
Electric Soldering Iron Co., Inc., Deep River, Conn.
Goss Gas, Inc., Glenshaw, Pa.
Hexacon Electric Co., Roselle Park, N. J.
Insto-Gas Appliance Co., Cedar Rapids, Iowa
Kemode Co., The, Inc., New York, N. Y.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Paul C. Roche Co., Inc., New York, N. Y.
Selas Corp. of America, Philadelphia, Pa.
Smith Welding Equipment Corp., Minneapolis, Minn.
Turner Brass Works, The, Sycamore, Ill.
Vulcan Electrical Co., Lynn, Mass.

SOLDERING IRONS, Electric

Electric Soldering Iron Co., Inc., Deep River, Conn.
General Electric Co., Schenectady, N. Y.
Hexacon Electric Co., Roselle Park, N. J.
Ideal Industries, Inc., Sycamore, Ill.
Kwikheat Mfg. Co., Glendale, Calif.
Multi-Products Tool Co., Newark, N. J.
Selas Corp. of America, Dresher, Pa.
Vulcan Electric Co., Danvers, Mass.
Wassco Electric Products Corp., Peoria, Ill.

SOLDERING OUTFITS, Acetylene or Hydrogen

Air Reduction Sales Co., New York, N. Y.
Allen, L. B., Co., Inc., Chicago, Ill.
Bastian- Blessing Co., The, Chicago, Ill.
Beaverdell, Inc., Phoenix, Arizona

Craftsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
General Welding & Equip. Co., Boston, Mass.
Goss Gas Inc., Glenshaw, Pa.
Hammon Precision Equipment Co., Oakland, Calif.
Harris Calorific Co., The, Cleveland, Ohio
Hoke, Inc., Cresskill, N. J.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Milburn, Alexander, Inc., Baltimore, Md.
Miles, John R. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
Ragle, J. M., Industries, Kansas City, Mo.
Reiner & Campbell Co., Inc., Elizabeth, N. J.
Sight Feed Generator Co., The, West Alexandria, Ohio
Smith Welding Equipment Corp., Minneapolis, Minn.
S-S Co., Brooklyn, N. Y.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Torit Manufacturing Co., St. Paul, Minn.
Velocity Power Tool Co., Pittsburgh, Pa.
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.

SOLDERING TIPS

Acet-A-Tip Co., Chicago, Ill.
Acetogen Gas Co., Detroit, Mich.
Air Reduction Sales Co., New York, N. Y.
American Oxygen Service Corp., Harrison, N. J.
Anzick Mfg. Co., Van Dyke, Mich.
Atlas Welding Accessories, Inc., Ferndale, Mich.
Bastian-Blessing Co., The, Chicago, Ill.
Beaverdell Co., The, Phoenix, Arizona
Becker Bros. Carbon Co., Cicero, Ill.
Craftsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
Eclipse Fuel Engineering Co., Rockford, Ill.
Electric Soldering Iron Co., Inc., Deep River, Conn.
Electroloy Co., The, Inc., Bridgeport, Conn.
General Welding & Equipment Co., Boston, Mass.
Hammon Precision Equipment Co., Oakland, Calif.
Harris Calorific Co., The, Cleveland, Ohio
Imperial Brass Mfg. Co., Chicago, Ill.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Mallory, P. R. & Co., Inc., Indianapolis, Ind.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Milburn, Alexander, Inc., Baltimore, Md.
Miles, John R. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
National Torch Tip Co., Pittsburgh, Pa.
Purity Cylinder Gases Inc., Grand Rapids, Mich.
Ragle, J. M., Industries, Kansas City, Mo.
Smith Welding Equip. Corp., Minneapolis, Minn.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Welders Supply & Mfg. Co., The, Cincinnati, Ohio

SOLDERING UNITS, RW

Ames Spot Welder Co., Inc., Brooklyn, N. Y.
Banner Welder, Inc., Milwaukee, Wis.
Eisler Engineering Co., Inc., Newark, N. J.
Ideal Industries, Inc., Sycamore, Ill.
Swift Electric Welder Co., Detroit, Mich.
Vemaline Products Co., Hawthorne, N. J.

SPARK LIGHTERS

(See "Torch Lighters")

SPATTER PREVENTIVES

Acme White Lead & Color Works, Detroit, Mich.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
Clarkson Laboratories, Inc., Philadelphia, Pa.
Hobart Bros. Co., Troy, Ohio
Kelite Products, Inc., Los Angeles, Calif.
Klem Chemicals, Inc., Dearborn, Mich.
Krembs & Co., Chicago, Ill.
Lincoln Electric Co., The, Cleveland, Ohio
Linde Co., New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Midland Paint & Varnish Co., Cleveland, Ohio
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Mowatt, George R., Co., New York, N. Y.
Smith, G. W., & Sons, Inc., Dayton, Ohio
Thompson & Co., Oakmont, Pa.
Wayne Chemical Products Co., Detroit, Mich.
Welding Alloy Mfg. Co., Newark, N. J.
Wolfe-Kote Co., Inc., Sheboygan, Wis.
York Engineering Co., Chicago, Ill.

SPECIALIZED WELDING EQUIPMENT

(See also "Automatic Welding Equipment," "Jigs, Fixtures and Manipulators," and "Positioners")

Acro Welder Mfg. Co., Milwaukee, Wis.
Agnew Electric Co., Milford, Mich.
Airline Welding and Engineering, Hawthorne, Calif.
Aronson Machine Co., Arcade, N. Y.
Auto Arc-Weld Mfg. Co., Cleveland, Ohio
Automatic Welding Co., Waukesha, Wis.
Automation Machine & Equipment Co., Inc., Milwaukee, Wis.
Bernard Welding Equipment Co., Chicago, Ill.
Cayuga Machine & Fabr. Co., Inc., Depew, N. Y.
Cullen-Friestedt Co., Chicago, Ill.
Delta Welder Corp., Detroit, Mich.
Eisler Engineering Co., Inc., Newark, N. J.
Expert Welding Machine Co., Div. Expert Die & Tool Co., Inc., Detroit, Mich.
Goodrich Welding Equipment Corp., Hudsonville, Mich.
Herrick, C. B., Mfg. Corp., Cleveland, Ohio
Hobart Bros. Co., Troy, Ohio
Hoffman, Robt W. Co., Inc., Chicago, Ill.
KSM Products, Inc., Merchantville, N. J.
Lewis Welding & Engrg. Co., Bedford, Ohio
Miller Elec. Mfg. Co., Inc., Appleton, Wis.
Morton Mfg. Co., Muskegon Heights, Mich.
Oilgear Co., Milwaukee, Wis.
Pandjiris Weldment Co., St. Louis, Mo.
Peck, Cecil C., Co., Cleveland, Ohio
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., The, Warren, Ohio
Unique Equipment, Inc., Brooklyn, N. Y.
Westinghouse Electric Corp., Buffalo, N. Y.
World Electric Co., Cleveland, Ohio

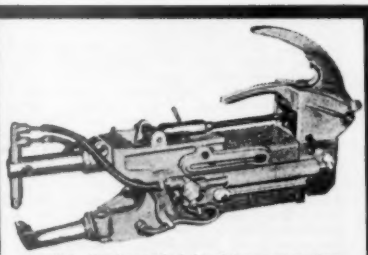
SPOT WELDERS

(See also "Portable Spot Welders")

Acme Electric Welder Co., Los Angeles, Calif.
Acro Welder Mfg. Co., Milwaukee, Wis.
Agnew Electric Co., Milford, Mich.
Allied Welder Corp., Dearborn, Mich.
Alphil Spot Welder Mfg. Co., Brooklyn, N. Y.
American Elec. Fusion Corp., Chicago, Ill.
Ames Spot Welder Co., Inc., Brooklyn, N. Y.
Ampower Products Co., Oak Lawn, Ill.
Aro Spot Welders, Long Island City, N. Y.

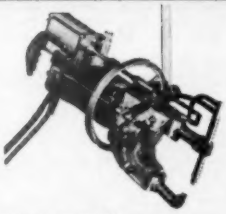
ARO
A BETTER SPOT WELDER for every job

P-166-A—For small shops. Semi-automatic timing. Low cost.


P-298-A—Hand operated. Ideal for average shop.

Most models available with automatic timer

DP-35—For jobs that are accessible from one side only.


P-410—Air operated. Recommended for heavy production.

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DIVISION OF
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Dealer Inquiries Invited

Banner Welder, Inc., Milwaukee, Wis.
Birdsell Mfg. Co., Palo Alto, Calif.
Brennan, Bucci & Weber, Inc., New York, N. Y.
Cooper Welders, Inc., Morton Grove, Ill.
Dalhart Eng. & Mfg. Co., Inc., Van Dyke, Mich.
Delta Welder Corp., Detroit, Mich.
Eisler Engineering Co., Inc., Newark, N. J.
Electric Arc, Inc., Newark, N. J.
Electric Welding Machine Co., Detroit, Mich.
Electron Arc, Inc., Lynn, Mass.
Expert Welding Machine Co., Detroit, Mich.
Federal Machine & Welder Co., The, Warren, Ohio
Federal Tool Engineering Co., Cedar Grove, N. J.
Goodrich Welding Equip. Corp., Hudsonville, Mich.
Hercules Electric & Mfg. Co., Inc., Brooklyn, N. Y.
Hoffman, Robt. W. Co., Inc., Chicago, Ill.
Kirkhof Mfg. Corp., Grand Rapids, Mich.
Larkin Welder & Machine Corp., Brooklyn, N. Y.
Link Welder Corp., Inc., Los Altos, Calif.
Martin Electric Div., Thompson Industries, Detroit, Mich.
Metron Instrument Co., Denver, Colo.
Micro Products Co., Chicago, Ill.
Miller Electric Mfg. Co., Inc., Appleton, Wis.
Multi-Hydromatic Welding & Mfg. Co., East Detroit, Mich.
National Electric Welding Mach. Co., Bay City, Mich.
Peer, Inc., Benton Harbor, Mich.
Precision Welder & Flexopress Corp., Cincinnati, Ohio
Progressive Welder Sales Co., Detroit, Mich.
Raytheon Mfg. Co., Waltham, Mass.
Resistance Welder Corp., Bay City, Mich.
Schott Metal Products Co., Akron, Ohio
Sciaky Bros., Inc., Chicago, Ill.
Stryco Mfg. Co., San Francisco, Calif.
Swift Electric Welder Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio
Thomson Electric Welder Co., Lynn, Mass.
United Welder Corp., Detroit, Mich.
Unitek Corp., Pasadena, Calif.
Universal Electric Sales Corp., Cleveland, Ohio
Universal Welder Corp., Cleveland, Ohio
Vacuum Tube Products Co., Oceanside, Calif.
Vangtronic Corp., The, Bridgeport, Conn.
Weldex, Inc., Detroit, Mich.
Welding Machines Mfg. Co., Detroit, Mich.

SPOT WELDER CONVERTER

Banner Welder, Inc., Milwaukee, Wis.
Expert Welding Mach. Co., Detroit, Mich.
Hoffman, Robt. W., Co., Inc., Chicago, Ill.
Uniflex Cable Co., Detroit, Mich.

SPRAY GUNS

(See "Paint Spray guns" "Metal Spray Guns," etc.)

STABILIZER, Welding Electrode

(See: "Electrode Storage Ovens")

STAINLESS STEEL

Allegheny Ludlum Steel Corp., Pittsburgh, Pa.
American Chain & Cable, Monessen, Pa.
American Silver Co., Inc., Flushing, N. Y.
American Steel & Wire Co., Cleveland, Ohio
Armco Steel Corp., Middletown, Ohio
Bethlehem Steel Co., Bethlehem, Pa.
Bissett Steel Co., The, Cleveland, Ohio
Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Carpenter Steel Co., The, Reading, Pa.
Castle, A. M., & Co., Chicago, Ill.
Central Steel & Wire Co., Chicago, Ill.
Chase Brass & Copper Co., Inc., Waterbury, Conn.
Crucible Steel Co. of America, Vacuum Metals Div., Syracuse, N. Y.
Eastern Stainless Steel Corp., Baltimore, Md.
Industrial Overlay Metals Inc., Eaton, Ohio
Ingersoll Steel Div., Borg-Warner Corp., Chicago, Ill.
International Nickel Co., Inc., The, New York, N. Y.
Jessop Steel Co., Washington, Pa.
Lukens Steel Co., Coatesville, Pa.
Page Steel & Wire Div., Amer. Chain & Cable Co., Inc., Monessen, Pa.
Republic Steel Corp., Cleveland, Ohio
Rustless Iron and Steel Corp., Baltimore, Md.
Ryerson, Joseph T. & Son, Inc., Chicago, Ill.
Sharon Steel Corp., Sharon, Pa.
Superior Steel Corp., Carnegie, Pa.
United States Steel Co., Pittsburgh, Pa.
U. S. Steel Supply Co., Chicago, Ill.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.

STAINLESS-STEEL, NICKEL ELECTRODES & NICKEL ALLOYS

Air Reduction Sales Co., New York, N. Y.
Allied Weld-Craft, Inc., Indianapolis, Ind.
Alloy Rods Co., York, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
American Welding Alloys, Inc., Brooklyn, N. Y.

DRAWALLOY
CORPORATION
WELDING WIRE

STAINLESS STEEL WELDING WIRE

Available on spools, coils, and in 36" cut lengths in these grades:

308	348
308ELC	349
309	410
310	430
312	502
316	1¼ Cr, ½ Mo
316ELC	2¼ Cr, 1 Mo
347	

TOOL STEEL WELDING ROD

Available in 36" cut lengths in these grades:

Oil Hardening
Air Hardening
Water Hardening
High Speed
Hot Work

DRAWALLOY CORPORATION
YORK 16, PENNSYLVANIA

Arcos Corp., Philadelphia, Pa.
Champion Rivet Co., Cleveland, Ohio
Eutectic Welding Alloys Corp., Flushing, N. Y.
Harnischfeger Corp., Milwaukee, Wis.
Interational Nickel Co., Inc., New York, N. Y.
Lincoln Electric Co., The, Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
McKay Co., The, Pittsburgh, Pa.
National Cylinder Gas Div., Chicago, Ill.
Northeast Metals Co., Philadelphia, Pa.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Reid-Avery Co., Baltimore, Md.
Shober Inc., Stockton, Calif.
Sight Feed Generator Co., West Alexandria, Ohio
Smith, A. O., Corp., Milwaukee, Wis.
Southern Oxygen Co., Bladensburg, Md.
Uniworld Research Corp. of America, Cleveland, Ohio
Welding Equipment & Supply Co., Detroit, Mich.
Westinghouse Electric Corp., Pittsburgh, Pa.

STAINLESS-STEEL FLUXES

Air Reduction Sales Co., New York, N. Y.
Allen, L. B., Co., Chicago, Ill.
Alloy Ring Service, Inc., Indianapolis, Ind.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
American Chemical & Flux Co., Brooklyn, N. Y.
American Products Corp., Chicago, Ill.
American Silver Co., Inc., Flushing, N. Y.
American Solder & Flux Co., Philadelphia, Pa.
American Welding Alloys Corp., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Andco, Inc., Orchard Park, N. Y.
Anti-Borax Compound Co., Inc., Ft. Wayne, Ind.
Arcos Corp., Philadelphia, Pa.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Burdett Oxygen Co., The, Cleveland, Ohio
Cleveland Precision Ring & Products Co., Cleveland, Ohio
Croton Chemical Corp., New York, N. Y.
Division Lead Co., Summit, Ill.
Dockson Corp., Detroit, Mich.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Farrelloy Co., Philadelphia, Pa.
Gasflux Co., The, Mansfield, Ohio
Johnson Gas Appliance Co., Cedar Rapids, Iowa
Johnson Mfg. Co., Inc., Mt. Vernon, Iowa
Kester Solder Co., Chicago, Ill.
Kirk, Morris P., & Son, Inc., Los Angeles, Calif.
Klem Chemicals, Inc., Dearborn, Mich.
Krembs & Co., Chicago, Ill.
Linde Co., New York, N. Y.
Morey Flux & Chem. Co., Wilmington, Del.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Sherman & Co., Flushing, N. Y.
Solar Aircraft Co., San Diego, Calif.
Special Chemicals Corp., Ossining, N. Y.
Superior Flux & Mfg. Co., Cleveland, Ohio
United Wire & Supply Corp., Providence, R. I.
Uniworld Research Corp. of America, Cleveland, Ohio
Weldit, Inc., Detroit, Mich.
Wolfe Kote Co., Inc., Sheboygan, Wis.

STAINLESS STEEL WELDING RODS

Air Reduction Sales Co., New York, N. Y.
Allegheny-Ludlum Steel Corp., Pittsburgh, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Brazing Alloys Co., Pelham, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Carpenter Steel Co., The, Reading, Pa.
Central Steel & Wire Co., Chicago, Ill.
Collins-Edmonds, Inc., Philadelphia, Pa.
Drawalloy Corp., York, Pa.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Johnston, A. P., Los Angeles, Calif.
Linde Co., New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
McCauley Alloy Sales Co., Chicago, Ill.
Metal & Thermit Corp., Rahway, N. J.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
National Cylinder Gas Div., Chicago, Ill.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Page Steel & Wire Div., Amer. Chain & Cable Co., Inc., Monessen, Pa.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Reid-Avery Co., Baltimore, Md.
Republic Steel Corp., Cleveland, Ohio
Uniworld Research Corp. of America, Cleveland, Ohio

STAMPING DIES

Acromark Co., The, Elizabeth, N. J.
Die Typing Corp., Detroit, Mich.
Diener, Geo. W., Mfg. Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
O'Neill-Irwin Mfg. Co., Lake City, Minn.
Paine Co., The, Chicago, Ill.
Pyramid Steel Co., Cleveland, Ohio
Schwerdtle Stamp Co., The, Bridgeport, Conn.
Service Machine Co., Elizabeth, N. J.
Verson Allsteel Press Co., Chicago, Ill.
Vogel Tool & Die Corp., Melrose Park, Ill.
Warren Alloys, Pontiac, Mich.

STEAM HOSE

Atlantic Metal Hose Co., Inc., New York, N. Y.
Boston Woven Hose & Rubber Co., Boston, Mass.
Diamond Mechanical Goods Division of The B. F. Goodrich Co., Akron, Ohio
Electric Hose & Rubber Co., Wilmington, Del.
Fauver, J. N., Co., Inc., Detroit, Mich.
Gates Rubber Co., The, Denver, Colo.
Goodall Rubber Co., Philadelphia, Pa.
Goodrich, B. F., Co., The, Akron, Ohio
Goodyear Tire & Rubber Co., Inc., Akron, Ohio
Hewitt-Robins, Inc., Stamford, Conn.
Home Rubber Co., Trenton, N. J.
Hose Accessories Co., Philadelphia, Pa.
Ingersoll-Rand Co., New York, N. Y.
Mulconroy Co., Philadelphia, Pa.
New York Belting & Packing Co., Passaic, N. J.
Quaker Rubber Corp., Philadelphia, Pa.
Raybestos-Manhattan, Inc., Passaic, N. J.
Republic Rubber Division, Lee Rubber and Tire Corp., Youngstown, Ohio

STEEL (SHEETS, PLATES, BARS, STRUCTURAL SHAPES, Etc.)

Acorn Iron & Supply Co., Philadelphia, Pa.
Armco Steel Corp., Middletown, Ohio
Bethlehem Steel Co., Bethlehem, Pa.
Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Columbia Steel Co., San Francisco, Calif.
Crucible Steel Co. of America, Vacuum Metals Div., Syracuse, N. Y.
Great Lakes Steel Corp., Detroit, Mich.
Granite City Steel Co., Granite City, Ill.
Ingersoll Steel Div., Borg-Warner Corp., Chicago, Ill.
Inland Steel Co., Chicago, Ill.
National Steel Corp., Ecorse, Detroit, Mich.
Republic Steel Corp., Cleveland, Ohio
Roebling's Sons Co., John A., Trenton, N. J.
Rustless Iron & Steel Corp., Baltimore, Md.
Ryerson, Joseph T., & Son, Inc., Chicago, Ill.
Sharon Steel Corp., Sharon, Pa.
Taylor-Wharton Iron & Steel Co., High Ridge, N. J.
Tennessee Coal, Iron & R. R. Co., Birmingham, Ala.
U. S. Steel Supply Co., Chicago, Ill.
United States Steel Co., Pittsburgh, Pa.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.
Worth Steel Co., Claymont, Del.
Wyckoff Steel Co., Pittsburgh, Pa.
Youngstown Sheet & Tube Co., Youngstown, Ohio

STEEL TUBING

American Metal Products Co., Detroit, Mich.
Armco Steel, Inc., Middletown, Ohio
Babcock & Wilcox Tube Co., The, Alliance, Ohio (welded) and Beaver Falls, Pa. (seamless).
Bethlehem Steel Co., Bethlehem, Pa.
Bissett Steel Co., The, Cleveland, Ohio
Bundy Tubing Co., Detroit, Mich.
Byers Co., A. M., Pittsburgh, Pa.
Carpenter Steel Co., The, Reading, Pa.
Central Steel and Wire Co., Chicago, Ill.
Crucible Steel Co. of America, Pittsburgh, Pa.
Flexonics Corp., Maywood, Ill.
Jones & Laughlin Steel Corp., Pittsburgh, Pa.
Michigan Steel Tube Products Co., Detroit, Mich.
National Electric Products Corp., Pittsburgh, Pa.
National Tube Co., Div., U. S. Steel Corp., Pittsburgh, Pa.
Ohio Seamless Tube Co., The, Shelby, Ohio
Pittsburgh Steel Co., Pittsburgh, Pa.
Republic Steel Corp., Cleveland, Ohio
Revere Copper & Brass, Inc., New York, N. Y.
Standard Tube Co., The, Detroit, Mich.
Superior Tube Co., Norristown, Pa.
Superior Steel Corp., Chicago, Ill.
Trent Tube Co., Div. of Crucible Steel Co., East Troy, Wis. (stainless and inconel only).
Timken Roller Bearing Co., Steel and Tube Div., Canton, Ohio
Tubular Alloy Steel Corp., Gary, Ind.
Uniworld Research Corp. of America, Cleveland, Ohio
U. S. Steel Supply Co., Chicago, Ill.
Youngstown Sheet & Tube Co., The, Youngstown, Ohio
Youngstown Welding & Engineering Co., The, Youngstown, Ohio

STEEL WIRE

American Steel & Wire Co., Cleveland, Ohio
Bethlehem Steel Co., Bethlehem, Pa.
Bissett Steel Co., The, Cleveland, Ohio
Buffalo Bolt Co., North Tonawanda, N. Y.
Carnegie-Illinois Steel Corp., Div. of U. S. Steel Corp., Pittsburgh, Pa.
Carpenter Steel Co., The, Reading, Pa.
Colorado Fuel and Iron Corp., Denver, Colo.
Columbia Steel Co., United States Steel Corp., Subsidiary, San Francisco, Calif.
Crucible Steel Co. of America, Vacuum Metals Div., Syracuse, N. Y.
Drawalloy Corp., York, Pa.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Page Steel & Wire Div. American Chain & Cable Co., Inc., Monessen, Pa.
Republic Steel Corp., Cleveland, Ohio
Roebling's, John A., Sons, Co., Trenton, N. J.
Sight Feed Generator Co., West Alexandria, Ohio
Superior Mfg. Co., Philadelphia, Pa.
Truscon Steel Co., Youngstown, Ohio
United States Steel Co., Pittsburgh, Pa.
Uniworld Research Corp. of America, Cleveland, Ohio
Weldit, Inc., Detroit, Mich.
Wheeling Steel Corp., Wheeling, W. Va.
Wickwire Spencer Steel Division, The Colorado Fuel & Iron Corp., Buffalo, N. Y.
Youngstown Sheet and Tube Co., Youngstown, Ohio

STOCKS and DIES, Bolt

Armstrong Bros. Tool Co., Chicago, Ill.
Bay State Tap & Die Co., Mansfield, Mass.
Beaver Pipe Tools, Inc., Warren, Ohio
Butterfield Division, Union Twist Drill Co., Derby Line, Vt.
Capewell Mfg. Co., The, Hartford, Conn.
Greenfield Tap & Die Corp., Greenfield, Mass.
Hollands Mfg. Co., Erie, Pa.
Morse Twist Drill & Machine Co., New Bedford, Mass.
Nye Tool & Machine Co., Chicago, Ill.
Oster Manufacturing Co., The, Cleveland, Ohio
Pratt & Whitney Div., Niles-Bement-Pond Co., W. Hartford, Conn.
Reed Manufactering Co., Erie, Pa.
Ridge Tool Co., The, Elyria, Ohio
Standard Tool Co., Cleveland, Ohio
Threadwell Tap & Die Co., Greenfield, Mass.
Toledo Pipe Threading Machine Co., The, Toledo, Ohio

STORED-ENERGY WELDERS

Electron Arc, Inc., Lynn, Mass.
Federal Machine & Welder Co., Warren, Ohio
Federal Tool Engineering Co., Cedar Grove, N. J.
Hoffman, Robt. W. Co., Inc., Chicago, Ill.
Kahle Engineering Co., North Bergen, N. J.
Raytheon Mfg. Co., Waltham, Mass.
Sciaky Bros., Inc., Chicago, Ill.
Taylor-Winfield Corp., Warren, Ohio
Unitek Corp., Pasadena, Calif.
Universal Electric Sales Corp., Cleveland, Ohio
Vacuum Tube Products Co., Oceanside, Calif.
Vangtronic Corp., 843 Maplewood Ave., Bridgeport 5, Conn.

STUDS, Flux-Filled

Anchor Metal Co., Inc., Brooklyn, N. Y.
KSM Products, Inc., Merchantville, N. J.
Nelson Stud Welding Div. of Gregory Industries, Lorain, Ohio
Shielded Stud Welding Co., Long Beach, Calif.

STUDS, Stud Welding

Graham Manufacturing Corp., Needham Heights, Mass.
KSM Products, Inc., Merchantville, N. J.
Nelson Stud Welding, Div. of Gregory Industries, Lorain, Ohio
Shielded Stud Welding Co., Long Beach, Calif.

STUD WELDERS

Federal Tool Engineering Co., Cedar Grove, N. J.
Graham Manufacturing Corp., Needham Heights, Mass.
Hobart Bros. Co., Troy, Ohio
KSM Products, Inc., Merchantville, N. J.
Metal & Thermit Corp., Rahway, N. J.
Miller Elec. Mfg. Co., Inc., Appleton, Wis.
Nelson Stud Welding, Div. of Gregory Industries, Lorain, Ohio
Shielded Stud Welding Co., Long Beach, Calif.
Westinghouse Electric Corp., Buffalo, N. Y.

SUBMERGED ARC FLUX CRUSHERS

American Pulverizer Co., St. Louis, Mo.
Gruendler, G. H., New York, N. Y.
Holmes, Robert, & Bros., Inc., Danville, Ill.

SUBMERGED-ARC WELDERS

(See: "Automatic Welding Equipment" and "Automatic Welding Heads, Submerged-Arc")

SUBMERGED-ARC WELDING WIRE

(See "Automatic Welding Wire")

SURFACE-HARDENING POWDER

All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Welding Alloys, Inc., Brooklyn, N. Y.
Anti-Borax Compound Co., Inc., Ft. Wayne, Ind.
Armor-Tuf Sales Corp., New York, N. Y.
Hard-N-Tuff Corp., Huntington, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Krembs & Co., Chicago, Ill.
Wall Colmonoy Corp., Detroit, Mich.
Western Carbide Corp., N. Hollywood, Calif.

SWEAT BANDS

American Optical Co., Southbridge, Mass.
Associated Bag & Apron Co., Chicago, Ill.
Atlas Welding Accessories, Inc., Ferndale, Mich.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Fibre-Metal Products Co., The, Chester, Pa.
Flexo Products, Inc., Westlake, Ohio
Flood Safety Products Co., Chicago, Ill.
General Scientific Equipment Co., Philadelphia, Pa.
Glendale Optical Co., Inc., Valley Stream, N. Y.
Halperin, A. E. Co., Inc., Boston, Mass.
Industrial Products Co., Philadelphia, Pa.
Kedman Co., Salt Lake City, Utah
Mine Safety Appliances Co., Pittsburgh, Pa.
Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
Ragle, J. M., Industries, Kansas City, Mo.
Safety Clothing & Equip. Co., Cleveland, Ohio
Safety First Supply Co., Pittsburgh, Pa.
Standard Safety Equip. Co., Chicago, Ill.
Twentieth Century Glove Corp. of Texas, Atlanta, Texas

SWEDGING TOOLS

Imperial Brass Mfg. Co., The, Chicago, Ill.
Lenco, Inc., Jackson, Mo.
Pyramid Steel Co., Cleveland, Ohio
Tweco Products, Inc., Wichita, Kans.

SWITCHES, Electric

Albert & J. M. Anderson Mfg. Co., Boston, Mass.
Arrow-Hart & Hegeman Co., Hartford, Conn.
Automatic Switch Co., Florham Park, N. J.
Automatic Temperature Control Co., Philadelphia, Pa.
Clark, C. P. & Co., Chicago, Ill.
Clark Controller Co., The, Cleveland, Ohio
Cutler-Hammer, Inc., Milwaukee, Wis.
Ebert Electronics Corp., Queens Village, N. Y.
Friez Instrument Division, Bendix Aviation Corp., Baltimore, Md.
General Electric Co., Schenectady, N. Y.
International Register Co., Chicago, Ill.
Master Electric Co., The, Dayton, Ohio
McGill Manufacturing Co., Valparaiso, Ind.
Ohmite Mfg. Co., Chicago, Ill.
Pyle-National Co., Chicago, Ill.
Rees, Mackworth G., Inc., Detroit 7, Mich.
Shallcross Mfg. Co., Collingdale, Pa.
Square D. Co., Milwaukee, Wis.
Trumbull Electric Mfg. Co., Plainville, Conn.
Weltronic Co., Detroit, Mich.
Westinghouse Electric Corp., Pittsburgh, Pa.

SWITCHES, Safety

Arrow-Hart & Hegeman Electric Co., Hartford, Conn.
Crouse-Hinds Co., Syracuse, N. Y.
Cutler-Hammer, Inc., Milwaukee, Wis.
Dillon, W. C. & Co., Van Nuys, Calif.
Electric Controller & Mfg. Co., Cleveland, Ohio
Federal Electric Products Co., Newark, N. J.
General Electric Co., Schenectady, N. Y.
Hays Mfg. Co., Erie, Pa.
Pyle-National Co., Chicago, Ill.
Rees, Mackworth G., Inc., Detroit, Mich.
Square D. Co., Milwaukee, Wis.
Trumbull Electric Mfg. Co., Plainville, Conn.
Westinghouse Electric Corp., Pittsburgh, Pa.

SWITCHES, Stepping

Albert & J. M. Anderson Mfg. Co., Boston, Mass.
Clare, C. P., & Co., Chicago, Ill.
Federal Telephone & Radio Corp., Clifton, N. J.
General Electric Co., Schenectady, N. Y.
Minneapolis-Honeywell Reg. Co., S. Minneapolis, Minn.
Shallcross Mfg. Co., Collingdale, Pa.

TANK FITTINGS

Bastian-Blessing Co., The, Chicago, Ill.
Grinnell Co., Inc., Providence, R. I.
Ladish Co., Cudahy, Wis.
Lenape Hydraulic Press & Forging Co., West Chester, Pa.
Lukens Steel Co., Coatesville, Pa.
Midwest Piping & Supply Co., Inc., St. Louis, Mo.
S & L Mfg. Co., Gardena, Calif.
Taylor Forge & Pipe Works, Chicago, Ill.
Welding Fittings Corp., New Castle, Pa.

TANK HEADS (Spun or Pressed)

Commercial Shearing & Stamping Co., The, Youngstown, Ohio
Lukens Steel Co., Coatesville, Pa.
Pressed Steel Tank Co., Milwaukee, Wis.
Republic Steel Corp., Cleveland, Ohio

TAPES

(See "Rules and Tapes")

TEMPERATURE MEASURING

(See: "Pyrometers," also, "Temperature Indicating Crayons")

TEMPERATURE-INDICATING CRAYONS, PAINTS and PELLETS

Atlas Welding Accessories, Inc., Ferndale, Mich.
Gordon Co., Claud S., Chicago, Ill.
Tempil Corp., New York, N. Y.

TENSILE-TESTING EQUIPMENT

Baldwin-Lima-Hamilton Corp., Philadelphia, Pa.
Buehler Ltd., Chicago, Ill.
Detroit Testing Machine Co., Detroit, Mich.
Dillon, W. C., & Co., Inc., Van Nuys, Calif.
Gordon, Claud S. Co., Chicago, Ill.
Independent Engineering Co., O'Fallon, Ill.
Paulsen-Webber Cordage Corp., New York, N. Y.
Precision Scientific Co., Chicago, Ill.
Riehle Testing Machine Div., American Machine and Metals, Inc., East Moline, Ill.
Steel City Testing Machines, Inc., Detroit, Mich.

TERMINALS, Cable

(See: "Cable Connectors," "Welding Cable Lugs")

TEST PLATES

(See "Welding Test Plates")

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THERMIT EQUIPMENT and SUPPLIES

Reade Mfg. Co., Inc., Jersey City, N. J.

TIG and MIG CONTROLS

Air Reduction Sales Co., New York, N. Y.
Hobart Bros. Co., Troy, Ohio
Linde Co., New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Mid-States Welder Mfg. Co., Chicago, Ill.
Miller Elec. Mfg. Co., Inc., Appleton, Wis.
Vickers Electric Div., St. Louis, Mo.
Waukee Engineering Co., Inc., Milwaukee, Wis.
Weltronic Co., Detroit, Mich.
Welduction Corp., Oak Park, Mich.
Westinghouse Electric Corp., Buffalo, N. Y.

TIG and MIG WELDING EQUIPMENT

(See also "Automatic Welding Heads, Inert-Gas")

Air Reduction Sales Co., New York, N. Y.
Alpha Metals, Inc., Jersey City, N. J.
American Oxygen Service Corp., Harrison, N. J.
Argopen Co., Syracuse, N. Y.
Bernard Welding Equipment Co., Chicago, Ill.
Hammon Precision Equipment Co., Oakland, Calif.
Hobart Bros. Co., Troy, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Metal & Thermit Corp., Rahway, N. J.
Mid-States Welder Mfg. Co., Chicago, Ill.
Miller Electric Mfg. Co., Appleton, Wis.
National Cylinder Gas Div., Chicago, Ill.
Oxo Welding Equipment Co., New Lenox, Ill.
Smith, A. O., Corp., Milwaukee, Wis.
Taylor-Winfield Corp., Warren, Ohio
Vickers Electric Div., St. Louis, Mo.
Tec Torch Co., Inc., Carlstadt, N. J.
Westinghouse Electric Corp., Buffalo, N. Y.
Wilson Equipment Corp., Paterson, N. J.

TINNING COMPOUNDS

Aladdin Rod & Flux Co., Grand Rapids, Mich.
Allen, L. B. Co., Inc., Chicago, Ill.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Solder & Flux Co., Philadelphia, Pa.
American Welding Alloys Corp., Brooklyn, N. Y.
Anti-Borax Compound Co., Inc., Fort Wayne, Ind.
Division Lead Co., Summit, Ill.
E. I. duPont de Nemours & Co., Grasselli Chemicals Dept., Wilmington, Del.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Fusion Engineering Co., Cleveland, Ohio
Johnson Gas Appliance Co., Cedar Rapids, Ia.
Johnson Mfg. Co., Inc., Mt. Vernon, Iowa
Kirk, Morris P., & Son, Inc., Los Angeles, Calif.
Klem Chemicals, Inc., Dearborn, Mich.
Krembs & Co., Chicago, Ill.
Metal Bond Mfg. Co., St. Louis, Mo.
Metalloy Prod. Co., Los Angeles, Calif.
Morris, Wheeler & Co., Inc., Philadelphia, Pa.
Pal-Weld Mfg. Co., Inc., Seattle, Wash.
Ruby Chemical Co., The, Columbus, Ohio
G. W. Smith & Sons, Inc., Dayton, Ohio
Swiss Laboratory, Cleveland, Ohio
Wayne Chemical Products Co., Detroit, Mich
York Engineering Co., Chicago, Ill.

TIP CLEANERS, Oxyacetylene

Acetogen Gas Co., Detroit, Mich.
Atlas Welding Accessories, Inc., Ferndale, Mich.
Dockson Corp., Detroit, Mich.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Maitlen & Benson, Inc., Long Beach, Calif.
National Torch Tip Co., Pittsburgh, Pa.
Ragle, J. M., Industries, Kansas City, Mo.
Randall Mfg. Co., North Kansas City, Mo.
Smith Welding Equip. Corp., Minneapolis, Minn.
Thermacote Co., Pasadena, Calif.

TITANIUM

American Silver Co., Inc., Flushing, N. Y.
Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Bridgeport Brass Co., Bridgeport, Conn.
Union Carbide Metals Co., Div of Union Carbide Corp., Niagara Falls, N. Y.
Johnston & Funk Titanium Corp., Wooster, Ohio
Mallory-Sharon Metals Corp., Niles, Ohio
Rem-Cru Titanium, Inc., Midland, Pa.
Republic Steel Corp., Cleveland, Ohio
Titanium Alloy Mfg. Div., National Lead Co., New York, N. Y.
Titanium Metals Corp. of America, New York, N. Y.

TITANIUM OXIDE

Foote Mineral Co., Philadelphia, Pa.
Shieldalloy Corp., Newfield, N. J.
Titanium Alloy Mfg. Div., New York, N. Y.

TOGGLE CLAMPS

(See "Clamps, Toggle")

TOOL CASE, Welding Equipment

(See "Chests, Welding Equipment")

TOOL and DIE ELECTRODES

Allegeny Ludlum Steel Corp., Pittsburgh, Pa.
Allied Weld-Craft, Inc., Indianapolis, Ind.
Alloy Rods Co., York, Pa.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Manganese Steel Div., Chicago Heights, Ill.
Champion Rivet Co., Cleveland, Ohio
Crucible Steel Co. of America, Pittsburgh, Pa.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Fansteel Metallurgical Corp., North Chicago, Ill.
Industrial Overlay Metals, Eaton, Ohio
Lincoln Electric Co., The, Cleveland, Ohio
Marquette Mfg. Co., Minneapolis, Minn.
Maurath, Inc., Cleveland, Ohio
McKay Co., Pittsburgh, Pa.
National Cylinder Gas Div., Chicago, Ill.
Resisto-Loy Company, Grand Rapids, Mich.
Welding Equipment & Supply Co., Detroit, Mich.

TOOL and DIE WELDING RODS

All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Manganese Steel Div., Chicago Heights, Ill.
Crucible Steel Co. of America, Pittsburgh, Pa.
Drawalloy Corp., York, Pa.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Industrial Overlay Metals Inc., Eaton, Ohio
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
Phillips, C. E. & Co., Detroit, Mich.
Resisto-Loy Co., Grand Rapids, Mich.
Welding Equipment & Supply Co., Detroit, Mich.

TOOL HOLDERS

Atlas Welding Accessories, Inc., Ferndale, Mich.
Lummis Mfg. Co., Pasadena, Calif.
Tillman, John, & Co., Long Beach, Calif.

TORCH LIGHTERS

Acetogen Gas Co., Detroit, Mich.
Flint Products Co., The, Brooklyn, N. Y.
Fuller, G. C., Mfg. Co., Cincinnati, Ohio
General Scientific Equip. Co., Philadelphia, Pa.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Matchless Utilities Co., New York, N. Y.
National Torch Tip Co., Pittsburgh, Pa.
Parker Safety Equip. Co., Irvington, N. J.
Ragle, J. M., Industries, Kansas City, Mo.
Randall Mfg. Co., Kansas City, Mo.
Safety Gas Lighter Co., Lynn, Mass.
Shoot-A-Lite Corp., New York, N. Y.
Thermacote Co., Pasadena, Calif.

TORCH NOZZLES

(See: "Flame-Cutting Tips" and "Gas Welding Tips")

TORCHES, Arc

(See:"Carbon Arc Torches")

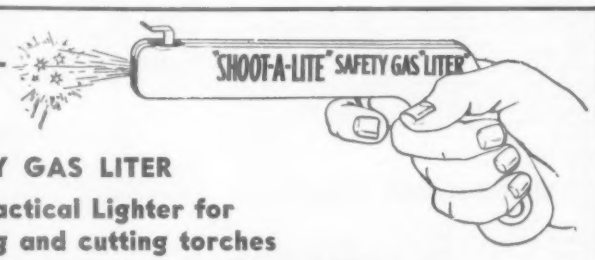
TORCHES, Carbon-Arc-Air, Gouging and Cutting

(See: "Gougers")

TORCHES, Gas

(See "Gas-Welding Torches")

SHOOT-A-LITE



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TORCHES, Rock Piercing, Cutting

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TRADE ASSOCIATIONS

American Society for Abrasives, Reading, Pa.
American Welding Society, New York, N. Y.
Automatic Welding Machinery Assn., Cleveland, Ohio
Grinding Wheel Institute, Cleveland, Ohio
Independent Oxygen Mfgs. Assn., San Francisco, Calif.
International Acetylene Assn., New York, N. Y.
National Welders Supply Assn., Philadelphia, Pa.
Ornamental Iron Assn., Memphis, Tenn.
Resistance Welders Mfgs. Assn., Philadelphia, Pa.
Resistance Welding Alloy Association, Philadelphia, Pa.
Ultrasonic Manufacturers Assn., New Rochelle, N. Y.

TRAILER EQUIPMENT, Axles, Couplers, etc.

Hammer Blow Tool Co., Wausau, Wis.

TRANSFORMERS, Arc Welding

(See: "Arc Welders, A-C")

TRANSFORMERS, Resistance Welding

(See "Resistance-Welding Transformers")

TREPANNING TOOLS

Fibre Metal Products Co., Chester, Pa.
Flint Prod. Co., Brooklyn, N. Y.

TRIMMERS, Flash

(See: "Flash Trimmers")

TUBE MILLS

American Electric Fusion Corp., Chicago, Ill.
McKay Machine Co., Youngstown, Ohio
Yoder Co., Cleveland, Ohio
Youngstown Foundry & Machine Co., Youngstown, Ohio

TUBES

(See "Electronic Tubes")

TUNGSTEN-CARBIDE ELECTRODES

Air Reduction Sales Co., New York, N. Y.
Alloy Rods Co., York, Pa.
American Manganese Steel Div., Chicago Heights, Ill.
Armite Laboratories, Los Angeles, Calif.
Coast Metals, Inc., Little Ferry, N. J.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Haynes Stellite Co., Kokomo, Ind.
Industrial Overlay Metals, Eaton, Ohio
MacDonald Co., Inc., Reno, Nev.
Mir-O-Cal Alloy Co., Inc., Los Angeles, Calif.
Purnell Alloy Co., Angleton, Texas
Rankin Mfg. Co., Alhambra, Calif.
Sight Feed Generator Co., Alexandria, Ohio
Stoody Co., Whittier, Calif.
Victor Equipment Co., San Francisco, Calif.

TUNGSTEN-CARBIDE WELDING RODS

Air Reduction Sales Co., New York, N. Y.
Alloy Rods Co., York, Pa.
American Manganese Steel Div., Chicago Heights, Ill.
Coast Metals, Inc., Little Ferry, N. J.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Haynes Stellite Company, Kokomo, Indiana
Industrial Overlay Metals, Inc., Eaton, Ohio
Mir-o-Cal Alloy Co., Inc., Los Angeles, Calif.
Purnell Alloy Co., Angelton, Texas
Rankin Mfg. Co., Alhambra, Calif.
Sight Feed Generator Co., The, W. Alexandria, Ohio
Stoody Co., Whittier, Calif.
Victor Equipment Co., San Francisco, Calif.

TUNGSTEN ELECTRODES

Cleveland Tungsten, Inc., Cleveland, Ohio
Harnischfeger Corp., Milwaukee, Wis.

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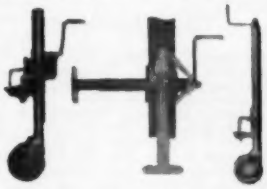

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North American Phillips Co., Inc., Lewiston, Me.
Sylvania Electric Prod. Inc., New York, N. Y.
Westinghouse Electric Corp., Bloomfield, N. J.

TURNING ROLLS

Aronson Machine Co., Arcade, N. Y.
Automatic Welding Co., Waukesha, Wis.
Herrick, C. B. Mfg. Corp., Cleveland, Ohio
Cayuga Machine & Fabr. Co., Inc., Depew, N. Y.
Lewis Welding & Engrg. Corp., Bedford, Ohio
Morton Mfg. Co., Muskegon Heights, Mich.
Oxo Welding Equipment Co., New Lenox, Ill.
Pandjiris Weldment Co., St. Louis, Mo.
Peck, Cecil C., Co., Cleveland, Ohio
Unique Equipment, Inc., Brooklyn, N. Y.
Webb Corp., Webb City, Mo.
World Electric Co., Cleveland, Ohio
Worthington Corp., Harrison, N. J.

TURNTABLES

(See also "Positioners")

Aronson Machine Co., Arcade, N. Y.
Cayuga Machine & Fabr. Co., Inc., Depew, N. Y.
Dominion Bridge Co., Ltd., Montreal, Quebec, Canada
Eisler Engineering Co., Inc., Newark, N. J.
Herrick, C. B., Mfg. Co., Cleveland, Ohio
Lewis Welding & Engrg. Corp., Bedford, Ohio
Peck, Cecil C., Co., Cleveland, Ohio
Sonobond Corp., Subsidiary of Aeroprojects, Inc., West Chester, Pa.
Superior Welding Co., Los Angeles, Calif.
Unique Equipment, Inc., New York, N. Y.
Worthington Corp., Plainfield, N. J.

ULTRASONIC TESTING

(See: "Inspection Equipment, Ultrasonic")

ULTRASONIC WELD EQUIPMENT

Acoustica Associates, Inc., Mineola, N. Y.
Gulton Industries, Metuchen, N. J.
Narda Ultrasonics Corp., Mineola, L. I., N. Y.
Sonobond Corp., Subsidiary of Aeroprojects, Inc., West Chester, Pa.

UNDERWATER CUTTING TORCHES

American Oxygen Service Corp., Harrison, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Chicago Tool and Engineering Co., Chicago, Ill.
Craftsweld Equip. Corp., Long Island City, N. Y.
National Cylinder Gas Div., Chicago, Ill.
Thompson Engineering Co., Grand Rapids, Mich.
Victor Equipment Co., San Francisco, Calif.

UNDERWATER WELDING and CUTTING ELECTRODES

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Craftsweld Equipment Corp., Long Island City, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Metal & Thermit Corp., Rahway, N. J.
Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.

VACUUM TESTERS, Seam

American Pipe & Steel Corp., Alhambra, Calif.

VALVES, Air Operated

Barksdale Valves, Los Angeles, Calif.
Bellows Co., The, Akron, Ohio
Galland-Henning Mfg. Co., Milwaukee, Wis.
Hunt Valve Co., Salem, Ohio
Jordan Industrial Sales Div., Cincinnati, Ohio
Leslie Co., Lyndhurst, N. J.
Rivett Lathe & Grinder Corp., Boston, Mass.
Ross Operating Valve Co., Detroit, Mich.
Taylor-Winfield Corp., Warren, Ohio

VALVES, Cylinder, Operating

Acetogen Gas Co., Detroit, Mich.
Bastian-Blessing Co., The, Chicago, Ill.
Hammon Precision Equipment Co., Oakland, Calif.
Hunt Valve Co., Salem, Ohio
Kerotest Mfg. Co., Pittsburgh, Pa.
Lapeer Mfg. Co., Detroit, Mich.
Linde Co., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
National Welding Equip. Co., San Francisco, Calif.
Superior Valve & Fitting Co., Pittsburgh, Pa.

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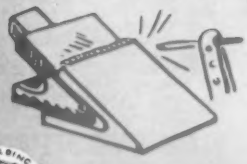

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VALVES, Oxygen-Cushioned

Acetogen Gas Co., Detroit, Mich.
American Oxygen Service Corp., Harrison, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Chek-Shock Mfg. Co., Fowler, Calif.
Hunt Valve Co., Salem, Ohio
Industrial Air Prod. Co., Portland, Ore.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.

VALVES, SOLENOID

Atkomatic Valve Co., Inc., Indianapolis, Ind.
Automatic Switch Co., Florham Park, N. J.

VENTILATING APPARATUS

(See also: "Exhaust Fans," "Collectors, Exhausters and Blower Systems," Etc.)

Aget-Detroit Mfg. Co., Ann Arbor, Mich.
Champion Blower & Forge Co., Lancaster, Pa.
Chelsea Fan & Blower Co., Inc., Irvington, N. J.
De Bothezat Fans Div., American Mach. & Metals, Inc., East Moline, Ill.
Detroit, Stamping Co., Detroit, Mich.
Engwald Corp., Brooklyn, N. Y.
General Blower Co., Morton Grove, Ill.
Ilg Electric Ventilating Co., Chicago, Ill.
Iron Lung Ventilator Co., Cleveland, Ohio
Mine Safety Appliances Co., Pittsburgh, Pa.
Ruemelin Mfg. Co., Milwaukee, Wis.
Torit Mfg. Co., St. Poul, Minn.
United Blower Co., New York, N. Y.

VISE JAWS

Armstrong Bros. Tool Co., Chicago, Ill.
Columbian Vise & Mfg. Co., The, Cleveland, Ohio
Desmond-Stephan Mfg. Co., Urbana, Ohio
Grand Specialties Co., Chicago, Ill.
Holland Mfg. Co., Erie, Pa.
Lord, Robert S., Co., Eau Claire, Wis.
Parker, Charles Co., The, Meriden, Conn.
Richards-Wilcox Mfg. Co., Aurora, Ill.
Ridge Tool Co., The, Elyria, Ohio
Sherman, H. B., Mfg. Co., Battle Creek, Mich.
Williams, J. H., & Co., Buffalo, N. Y.
Wilton Tool Mfg. Co., Chicago, Ill.

VISES, Machinists'

American Scale Co., Kansas City, Mo.
Armstrong Bros. Tool Co., Chicago, Ill.
Athol Machine & Foundry Co., Athol, Mass.
Belmont Abrasives, Boston, Mass.
Brown & Sharpe Mfg. Co., Providence, R. I.
Cardinal Machine Co., Glendale, Calif.
Chicago Tool & Engineering Co., Chicago, Ill.
Columbian Vise & Mfg. Co., The, Cleveland, Ohio
Desmond-Stephan Mfg. Co., Urbana, Ohio
Hollands Mfg. Co., Erie, Pa.
Lapeer Mfg. Co., Detroit, Mich.
Morgan Vise Co., Chicago, Ill.
Munton Mfg. Co., Franklin Park, Ill.
National Machine Tool Co., Racine, Wis.
North Bros. Mfg. Co., Division of The Stanley Works, Philadelphia, Pa.
Parker, Charles Co., The, Meriden, Conn.
Production Devices, Inc., Whitehall, N. Y.
Richards-Wilcox Mfg. Co., Aurora, Ill.
Skinner Chuck Co., The, New Britain, Conn.
Studebaker Machine Co., Maywood, Ill.
Universal Engineering Co., San Diego, Calif.
Wilton Tool Mfg. Co., Chicago, Ill.

VISES, Pipe

American Pipe Tool Co., Chicago, Ill.
American Scale Co., Kansas City, Mo.
Armstrong Bros. Tool Co., Chicago, Ill.
Athol Machine & Foundry Co., Athol, Mass.
Beaver Pipe Tools, Inc., Warren, Ohio
Billings & Spencer Co., The, Hartford, Conn.
Capewell Mfg. Co., The, Hartford, Conn.
Columbian Vise & Mfg. Co., The, Cleveland, Ohio
Crane Co., Chicago, Ill.
Desmond-Stephan Mfg. Co., Urbana, Ohio
Grand Specialties Co., Chicago, Ill.
Hollands Mfg. Co., Erie, Pa.
Imperial Brass Mfg. Co., The, Chicago, Ill.
Kenco Mfg. Co., Los Angeles, Calif.
Morgan Vise Co., Chicago, Ill.
Nye Tool & Machine Co., Chicago, Ill.
Peerless Machine Co., Racine, Wis.
Reed Mfg. Co., Erie, Pa.
Ridge Tool Co., The, Elyria, Ohio
Toledo Pipe Threading Machine Co., The, Toledo, Ohio
Trimont Mfg. Co., Div. of Aetna Industrial Corp., Roxbury, Boston, Mass.
Wilton Tool Mfg. Co., Chicago, Ill.

VOLTAGE REGULATORS, Arc

Federal Telephone & Radio Corp., New York, N. Y.
Gulow Corp., New York, N. Y.
Hobart Bros Co., Troy, Ohio
Metal & Thermit Corp., Rahway, N. J.
Mullenbach Div., Worthington Corp., Los Angeles, Calif.
Raytheon Mfg. Corp., Waltham, Mass.

WEDGE BARS

Allied Tractor & Steel Prod. Corp., Cleveland, Ohio
American Manganese Steel Div. of American Brake Shoe Co., Chicago Heights, Ill.
American Oxygen Service Corp., Harrison, N. J.
Divine Bros. Co., Utica, N. Y.
Ford Steel Co., St. Louis, Mo.
Industrial Overlay Metals, Eaton, Ohio
Kenco, Cupertino, Calif.
Leetonia Tool Co., The, Leetonia, Ohio
Pyramid Steel Co., Cleveland, Ohio
Steel Sales Corp., Chicago, Ill.
Stulz-Sickles Co., Newark, N. J.

WELD-CLEANING BRUSHES

(See also: "Weld Cleaning Tools")

Anderson Corp., Worcester, Mass.
Arcos Corp., Philadelphia, Pa.
Atlas Welding Accessories Co., Ferndale, Mich.
Bernard Welding Equipment Co., Chicago, Ill.
Fibre Metal Products Co., The, Chester, Pa.
Genter, C. D., Co., Chattanooga, Tenn.
Hewitt Rubber Div., Hewitt-Robins, Inc., Buffalo, N. Y.
Industrial Products Co., Philadelphia, Pa.
Linde Co., New York, N. Y.
Manufacturers Brush Co., The, Cleveland, Ohio
Milwaukee Brush Mfg. Co., The, Milwaukee, Wis.
National Cylinder Gas Div., Chicago, Ill.
Osborn Mfg. Co., Cleveland, Ohio
Pittsburgh Plate Glass Co., Brush Div., Baltimore, Md.

WELD-CLEANING TOOLS

(See also: "Weld-Cleaning Brushes," "Chipping and Scaling Hammers," "Wire Brushes," etc.)

Atlas Welding Accessories Co., Ferndale, Mich.
Bernard Welding Equipment Co., Chicago, Ill.
Buckeye Tool Corp., Dayton, Ohio
Carter-Lockard Co., Los Angeles, Calif.
Chicago Pneumatic Tool Co., New York, N. Y.
Cincinnati Tool Co., Norwood, Cincinnati, Ohio
Cleco Div. of Reed Roller Bit Co., Houston, Texas
Fibre-Metal Products Co., The, Chester, Pa.
Maitlen & Benson, Inc., Long Beach, Calif.
Manufacturing Brush Co., The, Cleveland, Ohio
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Millers Falls Co., Greenfield, Mass.
Milwaukee Brush Mfg. Co., Milwaukee, Wis.
National Ultrasonic Corp., Irvington, N. J.
Nu-Matic Grinders, Inc., Cleveland, Ohio
Osborn Manufacturing Co., The, Cleveland, Ohio
Quality Tools Corp., New Wilmington, Pa.
Ragle, J. M., Industries, Kansas City, Mo.
Rotor Tool Co., The, Cleveland, Ohio
Superior Pneumatic Division of Herband Tools, Cleveland, Ohio
Thor Power Tool Co., Chicago, Ill.
Weldit, Inc., Detroit, Mich.
Weldon Roberts Rubber Co., Newark, N. J.

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WELD-IDENTIFICATION HAMMERS

Acromark Co., Elizabeth, N. J.

WELD-MEASURING GAGES

American Oxygen Service Corp., Harrison, N. J.
Chicago Tool & Engineering Co., Chicago, Ill.
Fibre Metal Products Co., The, Chester, Pa.
Harnischfeger Corp., Milwaukee, Wis.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Metro Manufacturing Co., Long Island City, N. Y.
Nageldinger & Son, J., Inc., New York, N. Y.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.

WELD THROUGH SEALERS

Dayton Chemical Prod. Lab., Inc., West Alexandria, Ohio
Northeast Metals Co., Philadelphia, Pa.
Presstite Engineering Co., St. Louis, Mo.

WELD-TIME RECORDERS

Arcair Co., Lancaster, Ohio
Birdsell Mfg. Co., Palo Alto, Calif.
Brush Development Co., The, Cleveland, Ohio
Harnischfeger Corp., Milwaukee, Wis.
Hewlett-Packard Co., Palo Alto, Calif.
Machinery & Welder Corp., Chicago, Ill.
Rubicon Co., Philadelphia, Pa.
Weltronic Co., Detroit, Mich.

WELDER FILTERS

Air Filter Corp., Milwaukee, Wis.
Dockson Corp., Detroit, Mich.

WELDER TRAILERS

Hobart Bros. Co., The, Troy, Ohio
Lincoln Electric Co., Cleveland, Ohio

WELDERS, Arc

(See various categories under "Arc Welders")

WELDERS, Resistance

(See "Portable Spot Welders," "Butt and Flash Welders," "Gun Resistance Welders," etc.)

WELDING and BRAZING KITS

All-State Welding Alloys Co., Inc., White Plains, N. Y.
Air Reduction Sales Co., New York, N. Y.
American Oxygen Service Corp., Harrison, N. J.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Burdett Oxygen Co., Cleveland, Ohio
Dockson Corp., Detroit, Mich.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Linde Co., New York, N. Y.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Millburn, Inc., Alexander, Baltimore, Md.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
National Welding Equip. Co., Ltd., San Francisco, Calif.
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.

WELDING and CUTTING APPARATUS, Gas

Acetogen Gas Co., Detroit, Mich.
Acetylene Supply Co., Linden, N. J.
Air Reduction Sales Co., New York, N. Y.
American Gas & Chemical Corp., Harrison, N. J.
American Oxygen Service Corp., Harrison, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Buckeye Oxygen Co., Canton, Ohio
Burdett Oxygen Co., Cleveland, Ohio
Commercial Gas Corp., Wilkes-Barre, Pa.
Craftsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
General Welding & Equip. Co., Boston, Mass.
Goss Gas, Inc., Glenshaw, Pa.
Hammon Precision Equipment Co., Oakland, Calif.
Harris Calorific Co., The, Cleveland, Ohio
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metro Mfg. Co., Long Island City, N. Y.
Milburn, Alexander, Inc., Baltimore, Md.
Miles, John R. R., Inc., Minneapolis, Minn.
Modern Engineering Co., St. Louis, Mo.
Nageldinger, J., & Son, Inc., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
National Welding Equip. Co., San Francisco, Calif.
Oxo Welding Equip. Co., Chicago, Ill.
Smith Welding Equip. Corp., Minneapolis, Minn.
S-S Co., Brooklyn, N. Y.
Superior Oxy-Acetylene Mach. Co., Hamilton, Ohio
Victor Equipment Co., San Francisco, Calif.
Weldit, Inc., Detroit, Mich.

WELDING CABLE, Lead

Amer. Wire & Cable, New York, N. Y.
Anaconda Wire & Cable Co., New York, N. Y.
Belden Mfg. Co., Chicago, Ill.
Burdett Oxygen Co., The, Cleveland, Ohio
Carol Cable Div., Pawtucket, R. I.
Collyer Insulated Wire Co., Pawtucket, R. I.
General Cable Corp., New York, N. Y.
Hatfield Wire Cable Div., Hillside, N. J.
Hazard Insulated Wire Works, Div. of Okonite Co., Wilkes-Barre, Pa.
Kaiser Aluminum & Chemical Corp., Oakland, Calif.
Okonite Co., Passaic, N. J.
Paranite Wire & Cable Div., Essex Wire Corp., Ft. Wayne, Ind.
Phelps Dodge Copper Products Corp., New York, N. Y.
Plastic Wire & Cable Corp., The, Jewitt City, Conn.
Roebling's Son Co., John A., Trenton, N. J.
Rome Cable Corp., Rome, N. Y.
Simplex Wire & Cable Co., Cambridge, Mass.
Tweco Products Co., Wichita, Kan.
U. S. Rubber Co., New York, N. Y.
Walker Bros., Conshohocken, Pa.
Western Insulated Wire Co., Los Angeles, Calif.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.

WELDING CABLE LUGS

Albert & J. M. Anderson Mfg. Co., Boston, Mass.
Anthony, F. M. Co., Berkeley, Calif.
Burdett Oxygen Co., Cleveland, Ohio
Cam-Lok Div., Empire Prod., Inc., Cincinnati, Ohio
Chicago Tool & Engineering Co., Chicago, Ill.
Erico Products, Inc., Cleveland, Ohio
Fibre-Metal Prod. Co., The, Chester, Pa.
Jackson Products, Inc., Warren, Mich.
Lenco, Inc., Jackson, Mo.
Lincoln Electric Co., Cleveland, Ohio
Precision Welder Mfg. Co., Chicago, Ill.
Sherman Mfg. Co., H. B., Battle Creek, Mich.
Tweco Products, Inc., Wichita, Kan.
Will-Weld Mfg. Co., Inc., Omaha, Neb.

WELDING CABLE REELS

(See: "Cable Reels" and "Hose and Cable Reels"

WELDING CABLES, Power

American Steel and Wire Co., Cleveland, Ohio
Anaconda Wire & Cable Co., New York, N. Y.
Belden Mfg. Co., Chicago, Ill.
Burdett Oxygen Co., The, Cleveland, Ohio
Collyer Insulated Wire Co., Inc., Pawtucket, R. I.

(Welding cable listing continued on page 78.)

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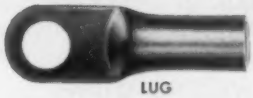

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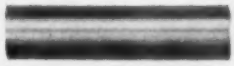

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WELDING CABLE, Power
(Continued)

General Cable Corp., New York, N. Y.
Hatfield Wire Cable Div., Hillside, N. J.
Hazard Insulated Wire Works, Div. of Okonite Co., Wilkes-Barre, Pa.
Okonite Co., The, Passaic, N. J.
Paranite Wire & Cable Div., Essex Wire Corp., Ft. Wayne, Ind.
Phelps Dodge Copper Products Corp., New York, N. Y.
Plastic Wire & Cable Corp., The, Jewitt City, Conn.
Roebling's Sons Co., John A., Trenton, N. J.
Rome Cable Corp., Rome, N. Y.
Simplex Wire & Cable Co., Cambridge, Mass.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
U. S. Rubber Co., New York, N. Y.
Victor Electric Wire & Cable Corp., Clifton, N. J.
Walker Bros., Conshohocken, Pa.
Western Insulated Wire Co., Los Angeles, Calif.
Wickwire Spencer Steel Div., Colorado Fuel & Iron Corp., New York, N. Y.

WELDING COMPOUNDS
(See: "Galvanizing Compounds," "Tinning Compounds")

WELDING FITTINGS

Babcock & Wilcox Co., Beaver Falls, Pa.
Bonney Forge & Tool Works, Allentown, Pa.
Cooper Alloy Foundry Co., The, Hillside, N. J.
Crane Co., Chicago, Ill.
Dresser Mfg. Div., Bradford, Pa.
Grinnell Co., Providence, R. I.
Ladish Co., Cudahy, Wis.
Lenape Hydraulic Press & Forging Co., West Chester, Pa.
Midwest Piping & Supply Co., Inc., St. Louis, Mo.
Northern Indiana Brass Co., Elkhart, Ind.
Oxo Welding Equipment Co., New Lenox, Ill.
S & L Mfg. Co., Gardena, Calif.
Taylor Forge & Pipe Works, Chicago, Ill.
Tube Turns, Louisville, Ky.
Victaulic Co. of America, Elizabeth, N. J.
Walworth Co., New York, N. Y.
Welding Fittings Corp., Newcastle, Pa.

WELDING FLANGES

Bonney Forge & Tool Works, Allentown, Pa.
Crane Co., Chicago, Ill.
Dresser Mfg. Div., Bradford, Pa.
Globe Steel Tubes Co., Milwaukee, Wis.
Grinnell Co., Providence, R. I.
Harrisburg Steel Co., Harrisburg, Pa.
Ladish Co., Cudahy, Wis.
Midwest Piping & Supply Co., Inc., St. Louis, Mo.
S & L Mfg. Co., Gardena, Calif.
Taylor Forge & Pipe Works, Chicago, Ill.
Tube Turns, Louisville, Ky.
Vogt, Henry, Machine Co., Louisville, Ky.
Walworth Co., New York, N. Y.
Welding Fittings Corp., Newcastle, Pa.

WELDING GENERATORS, D-C
(See "Arc Welders, D-C")

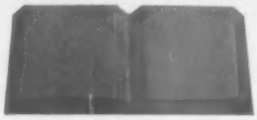
WELDING GUIDES and SUPPORTS

Diamonite Prod. Mfg. Co., Shreve, Ohio
Grinnell Co., Providence, R. I.
Jimmie Jones Co., The, Tulsa, Okla.
Lewis Welding & Engrg. Corp., Bedford, Ohio

WELDING HOSE
(See "Oxyacetylene Hose" and "Dual-Passage Welding Hose")

WELDING HOSE FITTINGS

Acetogen Gas Co., Detroit, Mich.
Air Reduction Sales Co., New York, N. Y.
American Oxygen Service Corp., Harrison, N. J.
Bastian-Blessing Co., The, Chicago, Ill.
Burdett Oxygen Co., The, Cleveland, Ohio
Craftsweld Equip. Corp., Long Island City, N. Y.
Dockson Corp., Detroit, Mich.
Fauver, J. N., Co., Inc., Detroit, Mich.
Harris Calorific Co., The, Cleveland, Ohio
Hewitt-Robins, Inc., Stamford, Conn.
K-G Equipment Co., Inc., Allentown, Pa.
Linde Co., New York, N. Y.
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Marquette Mfg. Co., Inc., Minneapolis, Minn.
Metro Mfg. Co., Long Island City, N. Y.
Nageldinger, J., & Son, Inc., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
National Torch Tip Co., Pittsburgh, Pa.
National Welding Equip. Co., San Francisco, Calif.
Oxo Welding Equipment Co., New Lenox, Ill.
Punch-Lok Co., Chicago, Ill.

"TEST-WELL"
WELDING TEST PLATE

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THE CHICAGO HARDWARE FOUNDRY CO.
NORTH CHICAGO, ILLINOIS

Red Devil Mfg. Co., Chicago, Ill.
S-S Co., Brooklyn, N. Y.
Sight Feed Generator Co., West Alexandria, Ohio
Uniflex Cable Co., Detroit, Mich.
Victor Equipment Co., San Francisco, Calif.
Western Enterprises, Inc., Bay Village, Ohio

WELDING HOSE REELS
(See "Hose and Cable Reels")

WELDING PISTOL, Vibrating

Metallizing Co. of America, Chicago, Ill.
Metallizing Engineering Co., Long Island, N. Y.
Mid-States Welder Mfg. Co., Chicago, Ill.

WELDING PLATENS
(See "Bending Blocks")

WELDING POSITIONERS
(See: "Positioners")

WELDING SCHOOLS

Cleveland School for Welding, Cleveland, Ohio
Greer Shop Training, Chicago, Ill.
Hobart Bros. Co., The, Troy, Ohio
International Correspondence Schools, Scranton, Pa.
Milwaukee School of Engineering, Milwaukee, Wis.
Utilities Engineering Institute, Chicago, Ill.
Welding & Metal Trades School, Brooklyn, N. Y.

WELDING SCREENS

Adair, Robin W. Co., Inc., Avoca, N. Y.
Frommelt Industries, Dubuque, Ia.
Singer Glove & Mfg. Co., Chicago, Ill.

WELDING TABLES

Acorn Iron & Supply Co., Philadelphia, Pa.
Aronson Machine Co., Arcade, N. Y.
Bentley Weldery, Inc., Syracuse, N. Y.
Challenge Machinery Co., The, Grand Haven, Mich.
Chicago Hardware Foundry Co., North Chicago, Ill.
Eastern Equipment Co., Inc., Willow Grove, Pa.
Eisler Engineering Co., Newark, N. J.
Federal Tool Engineering Co., Cedar Grove, N. J.
Hamilton Tool Co., The, Hamilton, Ohio
Harnischfeger Corp., Milwaukee, Wis.
Papec Machine Co., Shortsville, N. Y.
Peck, Cecil C., Co., Cleveland, Ohio
Wiese Plow Welding Co., Perry, Iowa
Worthington Corp., Dunellen, N. J.

WELDING TEST PLATES

Chicago Hardware Foundry Co., North Chicago, Ill.
CBC Industries, Inc., New York, N. Y.

WELDING TORCHES, Gas
(See: "Gas Welding Torches")

WELD NUTS

Ohio Bolt & Nut Co., Berea, Ohio
Parker-Kalon Div., Clifton, N. J.
Smith Bros. & Hughes, San Diego, Cal.

WELDORS' CAPS

Advertisers Mfg. Co., Ripon, Wis.
Aljay Mfg. Co., Inc., Philadelphia, Pa.
Atlas Welding Accessories, Inc., Ferndale, Mich.
Boyer-Campbell Co., Detroit, Mich.
Champion Rivet Co., Cleveland, Ohio
Fibre-Metal Products Co., The, Chester, Pa.
Flood Safety Products Co., Chicago, Ill.
Haygood Co., Baton Rouge, La.
Jackson Products, Inc., Warren, Mich.
Kedman Co., Salt Lake City, Utah
Lincoln Electric Co., The, Cleveland, Ohio
Liquid Carbonic Div. of General Dynamics Corp., Chicago, Ill.
Louisville Cap Co., Louisville, Ky.
Mine Safety Appliances Co., Pittsburgh, Pa.
Ragle, J. M., Industries, Kansas City, Mo.

WET BLASTING MACHINES

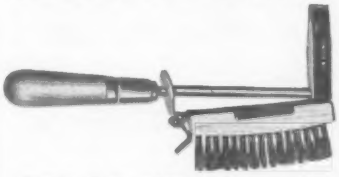
Clementina, Ltd., San Francisco, Calif.
Lewis Welding & Engrg. Corp., Bedford, Ohio
Pangborn Corp., Hagerstown, Md.
Wet Blast Mfg. Co., Inc., Detroit, Mich.
Wheelabrator Corp., Mishawaka, Ind.

WHITE METAL WELDING RODS

Air Reduction Sales Co., New York, N. Y.
Aladdin Rod & Flux Mfg. Co., Grand Rapids, Mich.
All-State Welding Alloys Co., Inc., White Plains, N. Y.
American Welding Alloys Corp., Brooklyn, N. Y.
Anchor Metal Co., Inc., Brooklyn, N. Y.
Eutectic Welding Alloys Corp., Flushing, N. Y.
Johnson Mfg. Co., Inc., Mt. Vernon, Ia.
Kapp Alloy and Wire Co., Franklin, Pa.
Linde Co., New York, N. Y.
National Cylinder Gas Div., Chicago, Ill.
Permalatem Welding Alloys, Inc., Red Bank, N. J.
Ragle, J. M., Industries, Kansas City, Mo.
Welding Alloys Mfg. Co., Newark, N. J.
White Metal Rolling & Stamping Corp., Brooklyn, N. Y.

WIRE BRUSHES, Hand

Anderson Corp., Worcester, Mass.
Arcos Corp., Philadelphia, Pa.
Atlas Welding Accessories Co., Ferndale, Mich.
(Wire brush listings continued on page 80.)

RUGGED—TOUGH

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INCREASES CHIPPING EFFICIENCY 18%
Chip and brush with one tool—Better brush angle protects knuckles—Guard protects fingers—Guard holds handle off bench, makes it easier to pick up—New, stronger ribbed frame—Easier brush removal for reversing or replacing.
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Solar steel heads • Induction hardened
Silver brazed steel handles
Metal or wood grips • Perfect balance
ATLAS WELDING ACCESSORIES INC.
707 E. Lewiston Detroit 20, Mich.

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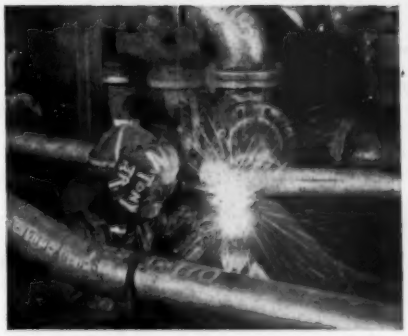

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RUBBER JACKET for extra flexibility and economy, combined with excellent resistance to physical abuse, moisture, heat and weather.

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WELDER'S USE

The "Milwaukee" line offers high quality brushes for the welding industry. Knot-type wheel and cupbrushes (power driven), wire hand scratch brushes (hand used).

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THE MILWAUKEE BRUSH MFG. CO. . . . MILWAUKEE 45, WIS.

WIRE BRUSHES, Hand

Fibre-Metal Products Co., The, Chester, Pa.
Herbrand Tools, Fremont, Ohio
Linde Co., New York, N. Y.
Manufacturers Brush Co., The, Cleveland, Ohio
Milwaukee Brush Mfg. Co., The, Milwaukee, Wis.
Osborn Manufacturing Co., Cleveland, Ohio
Pittsburgh Plate Glass Co., Brush Div., Baltimore, Md.
Solo-Horton Brush Co., Inc., New York, N. Y.

WIRE BRUSHES, Rotary and Cup, Power

L. B. Allen Co., Inc., Chicago, Ill.
Anderson Corp., Worcester, Mass.
Black & Decker Mfg. Co., Towson, Md.
Herbrand Tools, Fremont, O.
Manufacturers Brush Co., The, Cleveland, Ohio
Milwaukee Brush Mfg. Co., The, Milwaukee, Wis.
Osborn Manufacturing Co., Cleveland, Ohio
Pittsburgh Plate Glass Co., Brush Div., Baltimore, Md.
Rotor Tool Co., Cleveland, Ohio
Skil Corp., Chicago, Ill.
Solo-Horton Brush Co., Inc., New York, N. Y.
Swiss Laboratory, Cleveland, Ohio
United States Electric Tool Co., The, Cincinnati, Ohio

WIRE CLOTH

Chase Brass & Copper Co., Waterbury, Conn.
Hewitt-Robins, Inc., Stamford, Conn.
Manganese Steel Forge Co., Philadelphia, Pa.
Stryco Mfg. Co., San Francisco, Calif.

WIRE CUTTERS

Armstrong-Blum Mfg. Co., Chicago, Ill.
Bartlett Mfg. Co., Detroit, Mich.
Champion De Arment Tool Co., Meadville, Pa.
Crescent Tool Co., Jamestown, N. Y.
Duro Metal Products Co., Chicago, Ill.
Ideal Industries, Inc., Sycamore, Ill.
Lewis Machine Co., The, Cleveland, Ohio
Manco Mfg. Co., Bradley, Ill.
O'Neil-Irwin Mfg. Co., Lake City, Minn.
Porter, H. K., Inc., Somerville, Mass.
Stryco Mfg. Co., San Francisco, Calif.
Upson-Walton Co., The, Cleveland, Ohio

WIRE ROPE

American Cable Division of American Chain & Cable Co., Inc., Wilkes-Barre, Pa.
American Steel & Wire Co., Cleveland, Ohio
Bethlehem Steel Co., Bethlehem, Pa.
Broderick & Bascom Rope Co., St. Louis, Mo.
Colorado Fuel and Iron Corp., Denver, Colo.
Columbia Steel Co., United States Steel Corp., Subsidiary, San Francisco, Calif.
Crucible Steel Co. of America, New York, N. Y.
Hazard Wire Rope Division of American Chain & Cable Co., Inc., Wilkes-Barre, Pa.
Johnson Steel & Wire Co., Inc., Worcester, Mass.
Jones & Laughlin Steel Corp., Pittsburgh, Pa.
Lamson & Sessions Co., The, Cleveland, Ohio
Paulsen-Webber Cordage Corp., New York, N. Y.
Roebling's, John A., Sons Corp., Trenton, N. J.
Sasgen Derrick Co., Chicago, Ill.
Sunbury Wire Rope Mfg. Co., Sunbury, Pa.
Upson-Walton Co., The, Cleveland, Ohio

WIRE STRAIGHTENERS

Authauser Bros. Co., Albertson, N. Y.
Eisler Engineering Co., Inc., Newark, N. J.
Ideal Industries, Inc., Sycamore, Ill.
Lewis Machine Co., The, Cleveland, Ohio
Westinghouse Electric Corp., Pittsburgh, Pa.

WORK BENCHES, Steel

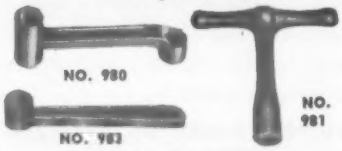
Acorn Iron & Supply Co., Philadelphia, Pa.
Angle Steel Stool Co., Plainwell, Mich.
Berger Manufacturing Division, Republic Steel Corp., Canton, Ohio
Bond Foundry and Machine Co., Manheim, Pa.
Challenge Machinery Co., The, Grand Haven, Mich.
Equipto Co., Aurora, Ill.
Lyon Metal Products, Inc., Aurora, Ill.
Market Forge Co., Everett, Mass.
Overbeke-Kain Co., The, Bedford, Ohio
Republic Steel Corp., Cleveland, Ohio
Richard-Wilcox Mfg. Co., Aurora, Ill.
Standard Pressed Steel Co., Jenkintown, Pa.
Sturdi-bilt Steel Products, Inc., Chicago, Ill.

WRENCHES, Cylinder

Chicago Hardware Foundry Co., North Chicago, Ill.

"Tank-Well" WRENCHES

For Acetylene Tanks



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X-RAY EQUIPMENT

(See "Inspection Equipment, X-Ray")

X-RAY FILM

(See "Radiographic Film")

X-RAY AND RADIUM PROTECTION

Balteau Electric Corp., Stamford, Conn.
Bar-Ray Products, Inc., Brooklyn, N. Y.
Canadium Radium & Uranium Corp., New York, N. Y.
Division Lead Co., Summit, Ill.
General Electric Co., X-Ray Dept., Milwaukee, Wis.
Industrial Products Co., Philadelphia, Pa.
Kelley-Koett Mfg. Co., Covington, Ky.
Pacific Transducer Corp., Los Angeles, Calif.
Picker X-Ray Corp., White Plains, N. Y.
St. John X-Ray Laboratories, Califon, N. J.
Tracerlab, Inc., Waltham, Mass.

ZINC SHEETS and BARS

American Silver Co., Inc., Flushing, N. Y.
Zinc Products Co., The, Greencastle, Ind. American Belmont Smelting & Ref. Works, Inc., Brooklyn, N. Y.
Consolidated Metals Corp., Detroit, Mich.
Eagle-Picher Sales Co., The, Cincinnati, Ohio
New Jersey Zinc Co., The, New York, N. Y.
Whitelight Wire & Supply, Brooklyn, N. Y.

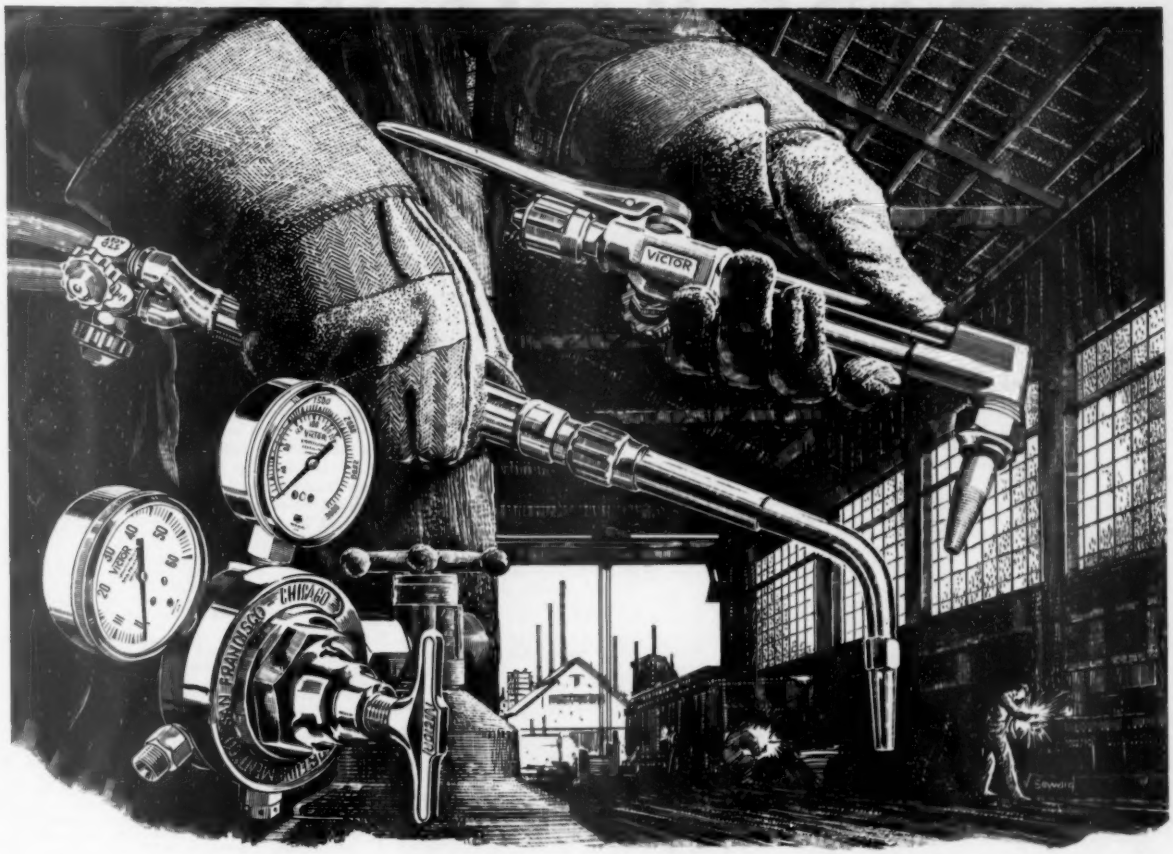
Letters . . . we want letters

From last year's survey WELDING ENGINEER knows it's on the right track—since most of the changes in this edition were at your request.

Did we miss something? If so, drop us a line. We welcome any comment—whether criticism, advice or compliment.

Drop us a line at:

Welding Engineer
P. O. Box 28,
Morton Grove, Ill.



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RELIABLE FIELD-PROVED REGULATOR DESIGN for safe, dependable pressure and flow control.

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TRADE NAME INDEX

An Alphabetical List of Trade Names Employed by Manufacturers of Welding Equipment, Tools and Supplies Whose Products Are Listed in this Buyer's Reference Number, with the Names of the Manufacturers and the Products to Which they Refer.

THE fact that trade names appear in this list does not mean that we guarantee them to be registered or the property of the manufacturers concerned.

WARNING—Therefore, no user of this reference, should, without independent verification, rely upon any information appearing in this section when so doing might result in loss or damage of any kind.—Welding Engineer Publications, Inc.

In the cases where two or more companies have submitted the same trade name for the same product and there is any question as to the rightful owner of the trade name, we have eliminated it entirely from our list.

Where initials are shown as trade names in this list, they are grouped at the start of the listings under each letter. Where two or more separated words or hyphenated words constitute a trade name, such as "Sure Hold" or "Sure-Hold," or when the two words are used as one, such as "Surehold," the name is listed in order according to the entire word.

Some trade names may have been inadvertently omitted. At the same time, some names you consider to be trade names may not be such, in fact. Therefore, if you cannot locate the name for which you are looking in the "Trade Name Index," look for a similar name in the "Classified List" among the manufacturers shown under the product in which you are interested.

A

A—Flux for cast iron welding. Bierman-Everett Foundry Co., Irvington, N. J.

ABC—Aluminum welding fluxes No. 8. Anti-Borax Compound Co., Fort Wayne, Ind.

AC-1—Mild steel, A-C—D-C (AWS E-6011) electrode. Harnischfeger Corp., Milwaukee, Wis.

AC-3—Mild steel, A-C—D-C (AWS E-6013) electrode. Harnischfeger Corp., Milwaukee, Wis.

AC WELD—Carbon electrodes. Speer Carbon Co., St. Marys, Pa.

A.E.—Rust preventives and removers. Wyandotte Chemical Corp., Wyandotte, Mich.

A.E.F.—Spot butt, seam and tube welders. American Electric Fusion Corp., Chicago, Ill.

AEF Copper—Welding tips for spot welding. American Electric Fusion Corp., Chicago, Ill.

AG—Silver solder flux. Farreloy Co., Philadelphia, Pa.

AO—Coats, short jackets, overalls, sleeves, aprons, capes, trousers, spats, legging and gloves. Welding goggles and lenses. American Optical Co., Southbridge, Mass.

AP-3—Mild steel, reverse polarity (AWS E-6010), electrode. Harnischfeger Corp., Milwaukee, Wis.

A.P.I.—Compressed cylinder gases. Steele Gases, Inc., Div. of Air Products, Inc., Forest Park, Ill.

APW—Silver brazing alloys. American Platinum & Silver Div., Newark, N. J.

A-R Steel (USS)—Abrasion resisting steel. United States Steel Corporation, Pittsburgh, Pa.

ASMC—Flux. Farreloy Co., Philadelphia, Pa.

AWP—Spectacles and lenses for weldors' and chippers' goggles and helmets. Eastern Equip. Co., inc., Willow Grove, Pa.

AW-2B—Manganese molybdenum alloy (AWS E-10020) electrode. Harnischfeger Corp., Milwaukee, Wis.

AW-3C—Austenitic stainless (Type 307) electrode. Harnischfeger Corp., Milwaukee, Wis.

AW-4—Chrome-moly low alloy (AWS E-10012) electrode. Harnischfeger Corp., Milwaukee, Wis.

AW-79—Electrode for automatic welding. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.

ABRASALOY—Tube, hard facing. Industrial Overlay Metals, Inc., Eaton, Ohio

ABRASIVEWAY—Grinding wheels. Simonds Abrasive Co., Philadelphia, Pa.

ABRASCOTE—Alloy steel electrodes. Harnischfeger Corp., Milwaukee, Wis.

ABRASOWELD—Hardfacing electrode. Lincoln Electric Co., Cleveland Ohio

ABRAZALOY—Hardfacing rod. Industrial Overlay Metals, Eaton, Ohio.

ACCO—Chain and hooks for chain and wire rope. American Chain Div., American Chain & Cable Co., Inc., York, Pa.

ACE FLUX—Flux for acetylene welding. Hobart Bros. Co., Troy, Ohio.

ACE WELDER—Leather welding gloves. E. J. Streichert, Chicago, Ill.

ACETOGEN—Cutting gases, flame-hardening and priming equipment, generators, flame-cutting machines and tips. Acetogen Gas Co., Detroit, Mich.

ACETYLITE—Automatic torch lighter for oxy-acetylene welders. Authauser Brothers Corp., Albertson, N. Y.

ACID-BAN—Safety Goggles. Bausch & Lomb Optical Co., Rochester, N. Y.

ACME—Spot welders and resistance welding equipment. Acme Electric Welder Co., Los Angeles, Calif.

ACME—Welding positioners and automatic welding fixtures and polishing, buffing, grinding and wire brushing, etc., machinery. Acme Mfg. Co., Detroit, Mich.

ACMELOY—Resistance welding electrodes. Acme Electric Co., Los Angeles, Calif.

ACCURATE—Fire extinguishers. Pyrene Manufacturing Co., Newark, N. J.

ACCURATE FREEZING-PROOF CHARGE—Fire extinguisher recharges. Pyrene Manufacturing Co., Newark, N. J.

ACORN—Bending blocks, welding plates, drift pins, arm clamps, bending posts, and Gooseneck holddown dogs. Acorn Iron and Supply Co., Philadelphia, Pa.

ACRO—Resistance welding machinery. Acro Welder Mfg. Co., Milwaukee, Wis.

ACRO-ARC—Production welding machinery using automatic arc and gas welding processes. Acro Welder Mfg. Co., Milwaukee, Wis.

ACROINK—Metal marking inks. Acromark Co., Elizabeth, N. J.

ACROMARK—Marking machines. The Acromark Co., Elizabeth, N. J.

ACROMATIC—Resistance and automatic shielded arc production welding machines. Acro Welder Mfg. Co., Milwaukee, Wis.

ACRO-MAGNETIC—Magnetic force spot and projection welders. Acro Welder Mfg. Co., Milwaukee, Wis.

ACROSTAMP—Steel stamps. The Acromark Co., Elizabeth, N. J.

ACTARC—Coatings for welding electrodes. Actarc Inc., Cleveland, Ohio

ACTIVOL—Pickling additive and cleaner. Harry Miller Corp., Philadelphia, Pa.

ACTRON—Rectifier tubes and other electronic devices. Allis-Chalmers Mfg. Co., Milwaukee, Wis.

ADALOX—Aluminum oxide coated abrasive. Behr-Manning Corp., Troy, N. Y.

ADDWEAR—Arc welding electrodes. National Cylinder Gas Div., Chicago, Ill.

ADJUST-A-ANGLE—Adjustable fixture for making multiple resistance spot welds at variable centers. S-M-S Corp., Detroit, Mich.

ADJUST-O-LOK—Helmet attachment for headgear. Jackson Products, Air Reduction Sales Co., Warren, Mich.

ADJUST-A-PRESSURE—Adjustable pressure holders. S-M-S Corp., Detroit, Mich.

ADLER—Portable acetylene generator. Adler Mfg. Co., Chicago, Ill.

ADVANCE—Rotary wire wheel brushes, weld-cleaning, wire hand and wire cup brushes and weld-cleaning tools. The Manufacturers' Brush Co., Cleveland, Ohio

AERISWELD—Bronze electrode. Lincoln Electric Co., Cleveland, Ohio

AERO—Welding torches. Harris Calorific Co., Cleveland, Ohio

AEROCARB—Liquid carburizing compound. American Cyanamid Co., New York, N. Y.

AEROCASE—Case hardening compound. American Cyanamid Co., New York, N. Y.

AERO HEAT—Heat treating salts. American Cyanamid Co., New York, N. Y.

AERO-JET—Light duty oxyacetylene torch. Marquette Mfg. Co., Inc., Minneapolis, Minn.

AGILE—Plastic welding rods. American Agile Corp., Bedford, Ohio

AGITON—Aluminum cleaner. Turco Products, Inc., Los Angeles, Calif.

AGNEW—Brazing machines and resistance welders and transformers. Agnew Electric Co., Milford, Mich.

AGRIPPA—Clamps. J. H. Williams & Co., Buffalo, N. Y.

AIR BLASTER—Ventilating fan. Chelsea Fan & Blower Co., Inc., Plainfield, N. J.

AIR WARDEN—Pressure regulators & air filters. Hannafin Corp., Des Plaines, Ill.

AIRCO—Acetylene, oxygen, nitrogen, argon and other atmospheric gas products, also welding and cutting apparatus, automatic welding and cutting machines, welding rods, electrodes and supplies. Air Reduction Sales Co., New York, N. Y.

AIRCOMATIC—Mig (metal inert-gas) welding equipment. Air Reduction Sales Co., New York, N. Y.

AIRCORE—Inflated grinding wheel. Nu-Matic Grinders, Inc., Cleveland, Ohio.

AIRCOSIL—Brazing alloys. Air Reduction Sales Co., New York, N. Y.

AIRCOSPOT—Tig (tungsten inert-gas) spot welding equipment. Air Reduction Sales Co., New York, N. Y.

AIRCRAFT—Light-duty torch. The K-G Equipment Co., Inc., Allentown, Pa.

AIRCRAFTER—Rectifier d-c arc welder. Miller Electric Mfg. Co., Appleton, Wis.

AIRCRAFTER—Welding turntable. Superior Welding Co., Los Angeles, Calif.

AIRCRAFT SPECIAL—Motor generator. Hobart Bros. Co., Troy, Ohio

AIR-FLOW—Air-fed welding helmet. Chicago Eye Shield Co., Chicago, Ill.

AIRFLOW—Cover goggles. U. S. Safety Service Co., Kansas City, Mo.

AIR—HARDENING — Martensinc steel hardfacing rod. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.

AIRLITE—Transparent protective garments. Standard Safety Equipment Co., Chicago, Ill.

AIR-MOVER—Ventilating blowers. Mine Safety Appliance Co., Pittsburgh, Pa.

AIR-O-LINE—Pneumatic controller. Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.

AIRSAN—Grease and air filters and welder filters. Air Filter Corp., Milwaukee, Wis.

AIR-SPEED—Multiple resistance welder. The Taylor-Winfield Corp., Warren, Ohio

AIRTAMER—Blow gun. Norgren Co., C. A. Englewood, Colo.

AIRTITE—Air and hydraulic vises, valves and cylinders. Production Devices, Inc., Whitehall, N. Y.

AJAX—Hose. Hewitt-Robins, Inc., Stamford, Conn.

AJAX—Induction furnaces. Ajax Electrothermic Corp., Div. Ajax Metal Co., Ajax Park, Trenton, N. J.

AJAX-HULTGREN—Electric salt bath furnaces. Ajax Electric Co., Philadelphia, Pa.

AJAX-NORTHRUP—Induction heating equipment and electric induction furnaces. Ajax Electrothermic Corp., Trenton, N. J.

ALADDIN—Rod for welding zinc base metals & soldering or brazing aluminum. Also soldering kits, fluxes, and soapstones. Aladdin Rod & Flux Mfg. Co., Grand Rapids, Mich.

ALBOX—Aluminum flux. Canadian Liquid Air Co., Ltd., Montreal, Que., Canada
ALCLEANER—Welding flux cleaner. Colonial Alloys Co., Philadelphia, Pa.
ALCOA—Aluminum alloys, welding and brazing rods, electrodes, welding and brazing fluxes, solder wire, castings, sheet, plate, tubing, etc. Aluminum Co. of America, Pittsburgh, Pa.
ALCOA I. G.—Aluminum welding wire for the Mig- and Tig processes. Aluminum Co. of America, Pittsburgh, Pa.
ALFCO—Fire extinguishers. American LaFrance-Foamite Corp., Elmira, N. Y.
ALFITE—Fire extinguishers and aircraft systems. American LaFrance-Foamite Corp., Elmira, N. Y.
ALFLEX—Flux coated electrodes. Canadian Liquid Air Co., Ltd., Montreal, Que., Canada
ALFRAX—Refractories. The Carborundum Co., Niagara Falls, N. Y.
ALJAY—Weldor's leather clothing. Aljay Mfg. Co., Inc., Philadelphia, Pa.
ALKALUME—Aluminum cleaner. Northwest Chemical Co., Detroit, Mich.
AL-OX—Aluminum oxide papers and cloths. Clover Manufacturing Co., Norwalk, Conn.
ALOXITE—Coated abrasives. Carborundum Co., The, Niagara Falls, N. Y.
ALL-PLASTIC—Plastic cover lens. Thermacote Co., Pasadena, Calif.
ALL-PURPOSE—Handles. Martin Wells, Inc., Los Angeles, Calif.
ALL-REZ—Abrasives. Clover Mfg. Co., Norwalk, Conn.
ALL-STATE—Alloys, fluxes, solders, welding & brazing rods, electrodes, galvanizing powder, silver dispenser, etc. All-State Welding Alloys Co., Inc., White Plains, New York.
ALL-WEATHER—First aid kits. Mine Safety Appliances Co., Pittsburgh, Pa.
ALLEGHENY METAL—Stainless steels. Allegheny Ludlum Steel Corp., Pittsburgh, Pa.
ALLEN—A-c transformer type arc welders and combination spot and arc welders. Allen Electric and Equipment Co., Kalamazoo, Mich.
ALLEN—Brazing alloys and rings, wire scratch brushes, fluxes and compounds, solder. L. B. Allen Co., Schiller Park, Ill.
ALLFLEX—All-purpose hose. Raybestos-Manhattan, Inc., Passaic, N. J.
ALLIGATOR JAW—Test clamps, ground clamps. Anderson, Albert & J. M. Mfg. Co., Boston, Mass.
ALLMAND—A-c arc welders. Allmand Bros. Mfg. Co., Holdrege, Nebr.
ALLOY No. 1180—Copper-silver brazing alloy. Alloy Specialties Co., Swissvale, Pa.
ALLOY No. 1270—Copper-silver brazing alloy. Alloy Specialties Co., Swissvale, Pa.
ALLOY No. 1300—Copper brazing alloy. Alloy Specialties Co., Swissvale, Pa.
ALLOY RINGS—Preformed brazing alloys. Alloy Ring Service, Inc., Indianapolis, Ind.
ALLOY-STEEL—"C" clamps, Grand Specialties Co., Chicago, Ill.
ALLSAFE—Weldor's clothing, goggles, helmets and accessories. American Allsafe Co., Buffalo, N. Y.
ALL-WELD—All-position welding electrode. Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
ALOXITE—Bonded abrasives and coated abrasives. The Carborundum Co., Niagara Falls, N. Y.
ALPHATRON—Polonium static eliminator. Canadian Radium and Uranium Corp., New York, N. Y.
ALPHIL—Spot welder machines. Alphil Spot Welder Mfg. Co., Brooklyn, N. Y.
ALTEM—Flux and alloy coated gas welding rods. Canadian Liquid Air Co., Ltd., Montreal, Que., Canada
ALTERNEX—Coated arc welding electrode. Metal and Thermit Corp., Rahway, N. J.
ALTUNG—Tungsten electrodes for Tig welding and Tig spot welding. Tec Torch Co., Inc., Carlstadt, N. J.
ALUBRO-WELD—Tinted protective welding lens. Willson Products, Inc., Reading, Pa.
ALUMAR—Aluminum gas welding rod. Arcos Corp., Philadelphia, Pa.
ALUMALUNG—Industrial roof ventilator. Iron Lung Ventilator Co., Cleveland, Ohio.
ALUMAWELD—Aluminum solder and flux. Johnson Mfg. Co., Inc., Mount Vernon, Iowa.
ALUMEX—50-60, 70 Fire brick and kiln liners. Mexico Refractories Co., Mexico, Mo.
ALUMEND—Coated aluminum arc-welding electrodes. Arcos Corp., Philadelphia, Pa.
ALUMINOX—For cast aluminum welding rods and aluminum flux. Central Steel & Wire Co., Chicago, Ill.
A-LUM-ITE—Rod for brazing aluminum and welding white metals. United Welding Service Co., Franklin, Pa.
ALUMITE—Fire brick, refractory cement, preheating furnaces and refractories. The Massillon Refractories Co., Massillon, Ohio
ALUMINWELD—Aluminum welding electrode. Lincoln Electric Co., Cleveland, Ohio
ALUMSIL—Welding cast aluminum silicon rods. Chicago Hardware Foundry Co., North Chicago, Ill.
ALUNDUM—Grinding wheels, abrasives, refractories. Norton Co., Worcester, Mass.
ALUNDUM—Abrasive cloth. Armour & Co., Alliance, Ohio
ALUTIN—Special solder for aluminum. Eutectic Welding Alloys Corp., Flushing, N. Y.
ALWAYS RELIABLE—Blow torches, firepots. Otto Bernz Co., Inc., Rochester, N. Y.
ALWELD—Oxygen, acetylene and medical trucks. Welded Truck & Specialty Co., Inc., Chicago, Ill.
ALZO-LITE—Floodlight. Benjamin Elec. Mfg. Co., Des Plaines, Ill.
A-MAL-GAM—Fluxes. Smith Welding Equipment Corporation, Minneapolis, Minn.
AMAZALOY—Steel hardening compound. All-State Welding Alloys Co., Inc., White Plains, N. Y.
AMBRALOY—Copper aluminum alloys. American Brass Co., Waterbury, Conn.
AMBRAZE—Welding, soldering, brazing alloys. American Brazing Alloys Co., Pelham, N. Y.
AMCO—Soldering, brazing and welding fluxes, aluminum solder, tinning and galvanizing compounds. American Solder & Flux Co., Philadelphia, Pa.
AMCOHOOD—Welding helmets. Eastern Equipment Co., Inc., Willow Grove, Pa.
AMCO-GOGGLE—Goggles, welders and chippers. Eastern Equipment Co., Inc., Willow Grove, Pa.
AMCOROD—Oxyacetylene welding rods. Eastern Equipment Co., Inc., Willow Grove, Pa.
AMCOWELD—Oxyacetylene and arc welding accessories, safety equipment and clothing. Eastern Equipment Co., Inc., Willow Grove, Pa.
AMERCLAD—Electrical cables. American Steel and Wire Co., Cleveland, Ohio
AMERICAN—Calcium carbide. American Carbide & Chemical Corp., St. Louis, Mo.
AMERICAN—Flexible metal hose and tubing. American Oxygen Service Corp., Harrison, N. J.
AMERICAN—Hose, clamps. American Stamping Co., Battle Creek, Mich.
AMERICAN—Vises, cutters, benders, pipe reamers and die stock sets. American Pipe Tool Co., Chicago, Ill.
AMERICAN—Flexible metal hose and tubing. The American Brass Co., American Metal Hose Branch, Waterbury, Conn.
AMERICAN—Electrical Wire & Cables. American Steel & Wire Co., Cleveland, Ohio
AMERICAN FARM—Arc welder. Precision Welder Mfg. Co., Chicago, Ill.
AMERICAN LAFRANCE—Fire extinguishers, fire extinguishing systems, and fire hose. American LaFrance Corp., Elmira, N. Y.
AMERROD—Oxyacetylene rods, bars and flux coated electrodes. Eastern Equipment Co., Inc., Willow Grove, Pa.
AMERTRAN—Electric transformers. American Transformer Co., Newark, N. J.
AMER-WELD—Electric spot welding machines. American Transformer Co., Newark, N. J.
AMESWELD—Resistance welding equipment. Ames Spot Welder Co., Brooklyn, N. Y.
AMPCO—Special aluminum bronze alloys and products. Ampco Metal, Inc., Milwaukee, Wis.
AMPCO-BRAZ—Gas filler rods. Ampco Metal, Inc., Milwaukee, Wis.
AMPCOLOY—Series of special commercial alloy and products. Ampco Metal, Inc., Milwaukee, Wis.
AMPCO-TRODE—Coated aluminum bronze welding electrodes. Ampco Metal, Inc., Milwaukee, Wis.
AMPCO-WELD—Resistance welding electrodes and accessories. Brazing flux. Ampco Metal, Inc., Milwaukee, Wis.
AMPEREX—Control tubes for resistance welding and other electronic tubes. Amperex Electronic Corp., Hicksville, L. I., N. Y.
AMPOWER—Portable spot welder. Ampower Prod. Co., Oak Lawn, Ill.
AMPROBE JUNIOR—Ammeters. Pyramid Instrument Corp., Lynbrook, N. Y.
AMSCO—General product line, including all welding rods. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
AMWEL—Welding and brazing fluxes and rods. Metal cleaners and compounds, brazing alloy rings, brazing soldering and welding alloys, aluminum and metallizing wire. American Welding Alloys Corp., Brooklyn, N. Y.
AMWIRE—Brazing fluxes. American Welding Alloys Corp., Brooklyn, N. Y.
ANACONDA—Brass products and copper and copper alloy welding rods. American Brass Co., Waterbury, Conn.
ANCOR—Sponge iron powder for electrode coatings. Hoeganaes Sponge Iron Corp., Riverton, N. J.
ANDERSON—Carbon arc torch. Albert & J. M. Anderson Mfg. Co., Boston, Mass.
ANDERSON—Wire wheel brushes & hand scratch brushes. Anderson Corp., Worcester, Mass.
ANNITE—Alloy welding rod. Bisset Steel Co., Cleveland, Ohio
ANODE—Welding electrode for use on cast iron. Lincoln Electric Co., Cleveland, Ohio
ANSUL—Fire extinguishers and chemicals. Ansul Chemical Co., Marinette, Wis.
ANTI-BORAX—Welding & brazing fluxes. Anti-Borax Compound Co., Fort Wayne, Ind.
ANTI-FOG—Compound for safety goggles lens to keep them from fogging. American Optical Co., Southbridge, Mass.
ANTI-FOG "COMP. MCG."—Compounds, anti-fog, lens cleaner. Merix Chemical Co., Chicago, Ill.
ANTI-SPATTER—Spatter preventive. Wolfe-Kote Co., Inc., Sheboygan, Wis.
ANTIGLARE—Lenses. Chicago Eye Shield Co., Chicago, Ill.
AOXCO—Compressed acetylene, welding grade carbon dioxide, compressed oxygen. Alabama Oxygen Co., Inc., Birmingham, Ala.
AQUA SOL—Water soluble grinding compound. Wayne Chemical Products Co., Detroit, Mich.
AQUAMAG—Magnesium oxide filler in welding rod coatings. Foote Mineral Co., Philadelphia, Pa.
AQUIFLUX—Soldering flux. Special Chemicals Corp., Ossining, N. Y.
ARC-BAN—Protective welding lenses. Bausch & Lomb Optical Co., Rochester, N. Y.
ARC-CRAFT—Mild steel, low hydrogen, low alloy & cast iron electrodes. Allied Weld-Craft Inc., Indianapolis, Ind.
ARC MASTER—Electrode holders. Wagner, H. J., Products, Inc., Jackson, Mo.
ARC-TWIN—Pipe and tube notching tools. Vogel Tool & Die Corp., Melrose Park, Ill.
ARCAIR—Arc gouging equipment and electrodes. Arcair Co., Lancaster, Ohio
ARCALOY—Stainless steel and heat resisting electrodes. Alloy Rods Co., York, Pa.
ARC-BAN—Welding goggles. Bausch & Lomb Optical Co., Rochester, N. Y.
ARC-BAN—Welding plates for arc welding helmets. Kimball Safety Products Co., Cleveland, Ohio
ARC-CRAFT—Electrodes. Allied Weld-Craft, Inc., Indianapolis, Ind.
ARC-FIT—Tube and pipe notching tools. Vogel Tool & Die Corp., Melrose Park, Ill.
ARCBRONZ—Coated phosphor bronze electrode for welding bronze, brass and copper. Hobart Bros. Co., Troy, Ohio.
ARCMASTER—High frequency unit for attachment to any type of A-C arc welder. Welding Apparatus Co., Chicago, Ill.
ARCOSITE—Stainless-steel flux. Arcos Corp., Philadelphia, Pa.
ARCOS—Special alloy electrodes. Arcos Corp., Philadelphia, Pa.
ARCOSARC—Automatic welding process utilizing CO_2 shield and flux-cored electrode. Arcos Corp., Philadelphia, Pa.
ARCO-WAND—Flux recovery unit. American Vacuum Co., Chicago, Ill.
ARCRONOGRAPH—Graphic instrument for recording uniformity of arc stream. Rubicon Company, Philadelphia, Pa.
ARCTROL—Foot operated arc control. Mullenbach Div., Los Angeles, Calif.
ARCWELD—Electrodes. Miller Electric Mfg. Co., Inc., Appleton, Wis.
ARGONARC—Automatic arc welding equipment. National Cylinder Gas Div., Chicago, Ill.
ARGOPEN—Air-cooled, pen-size Tig torch. Argopen Co., No. Syracuse, N. Y.
ARIDAIR—Electrode stabilizer. Fred. C. Archer, Inc., Milwaukee, Wis.
ARMALOY—Alloy steel wrenches, socket and drive parts wrenches. Armstrong Bros. Tool Co., Chicago, Ill.
ARMCO—Steel sheets, (carbon), stainless steel sheets, strip, bar, wire. Tubing, mechanical welded, cold-rolled, zinc control, aluminum coated. Armco Steel Corp., Middletown, Ohio
ARMGLO—Resistance welders, automatic timers for resistance welders and resistance welding electrodes. Armglo Co., Milwaukee, Wis.
ARMITE—Hardfacing material and welding rods, oxygen seal, air drills, air hammers, and air regulators. Armite Laboratories, Los Angeles, Calif.
ARMITE-ELD—Hardfacing rods, water course and mudgun nozzle. Armite Laboratories, Los Angeles, Calif.
ARMORARC—Armor welding electrodes. Alloy Rods Co., York, Pa.
ARMORIZE—Electrodes. Crucible Steel Co. of America, Harrison, N. J.
ARMOR-TUF—Hardening compound. Armor-Tuf Sales Corp., New York, N. Y.
ARMOURCLAD and **ARMOURITE**—Abrasives. Armour & Co., Alliance, Ohio
ARMSTRONG—"C" Clamps and machinists vises. Armstrong Bros. Tool Co., Chicago, Ill.
ARMSTRONG — Fire bricks, refractory cement, Armstrong Cork Co., Lancaster, Pa.
ARMSTRONG BRIDGEPORT—Pipe Tools. Capewell Mfg. Co., Hartford, Conn.
ARO—Portable spot welders and automatic timers. Guthery Machine Tool Corp., Long Island City, N. Y.
ARONSON-TWINNER—Magnetic welding clamps. Aronson Machine Co., Arcade, N. Y.
ARROW-BLAST—Abrasive for sand blasting. Norton Co., Worcester, Mass.
ASBESTOS FIREMAN—Safety clothing. Wheeler Protective Apparel, Inc., Chicago, Ill.
ASCO—Solenoid valves and welding relays. Automatic Switch Co., Florham Park, N. J.
ASCO—Acetylene. Acetylene Service Co., Denver, Colo.
ASCO-BRAZE—Silver brazing alloy. American Silver Co., Flushing, N. Y.
ASCO—Gas welding and cutting equipment. Acetylene Supply Co., Linden, N. J.
ATCOTRONIC—Timers-contractors. Automatic Timing & Controls, Inc., King of Prussia, Pa.
ATKOMATIC—Solenoid valves. Atkomatic Valve Co., Inc., Indianapolis, Ind.
ATLAS—Electric arc welder. Precision Welder Mfg. Co., Chicago, Ill.
ATLAS—Cast iron welding flux. Air Reduction Sales Co., New York, N. Y.
ATLAS—Weld cleaning tools, cleaning brushes, dual-case & tools; marking hammers and hand stamps. Atlas Welding Accessories Co., Ferndale, Mich.
ATLAS—Torch lighters and flints. Flint Products, Co., Brooklyn, N. Y.
ATLAS—Band saws, drilling machines, bench, grinders, bench and floor. Atlas Press Co., Kalamazoo, Mich.

ATOM ARC—Iron-powder, low-hydrogen electrodes. Alloy Rods Co., York, Pa.
ATOMIC—A. C. welders. Will-Weld Mfg. Co., Inc., Omaha, Neb.
AUFHAUSER—Machinery used in production of welding electrodes. Aufhauser Bros. Co., Albertson, N. Y.
AUTO-ARC—Welding head and automatic welding wire. Auto Arc Weld Mfg. Co., Cleveland Ohio
AUTO-BODY—Welding torches. Modern Engineering Co., St. Louis, Mo.
AUTOCHEMIC—Brazing fluxes. Eutectic Welding Alloys Corp., Flushing, N. Y.
AUTOGENIZER—Compound. Lincoln Electric Co., Cleveland, Ohio
AUTO-BLOC—Chain hoists. David Round & Son, Cleveland, Ohio
AUTO-LITE—Dials, indicating and recording thermometers and recording gauges. Instrument Div., Electric Auto-Lite Co., Toledo, Ohio
AUTOMAT—Welding torch. Modern Engineering Co., Inc., St. Louis, Mo.
AUTOMATIC—Welding torches. The Harris Calorific Co., Cleveland, Ohio
AUTO-WELD-MATON—Automatic welding fixture. Pandjiris Weldment Co., St. Louis, Mo.
AVIATOR—Welding torch. Modern Engineering Co., St. Louis, Mo.
AVIATOR JET—Welding and cutting torches. Modern Engineering Co., St. Louis, Mo.
AXIAL AIRFOIL—Fans. Chicago Blower Corp., Franklin Park, Ill.

B

BBB—Carbon electrodes, carbon plates and paste, cooper coated cored carbon electrodes, carbon brush sets. Becker Bros. Carbon Co., Cicero, Ill.
BH—Dual-spot welder. Hirst Electronic Development Ltd., London, Eng.
BN—Metal cleaners. Wyandotte Chemical Corp., Wyandotte, Mich.
BR—Hardfacing rod. Mir-O-Col Alloy Co., Los Angeles, Calif.
BABY GEORGE—Small universal ram-type welder. Cecil C. Peck Co., Cleveland, Ohio
BAL-GUARD—Bausch & Lomb Optical Co., Rochester, N. Y.
BAL-SAFE—Bausch & Lomb Optical Co., Rochester, N. Y.
BAL-SPEC—Bausch & Lomb Optical Co., Rochester, N. Y.
BALBACH—Dry oxygen and acetylene. The Balbach Co., Omaha, Neb.
BALDOR—Grinders & motors, bench and pedestal. Baldor Electric Co., St. Louis, Mo.
BALTOGRAPH—Portable X-ray unit. Balteau Electric Corp., Stamford, Conn.
BALTOSPOT—X-ray unit. Balteau Electric Corp., Stamford, Conn.
BANNER—Resistance welders. Banner Mfg. Co. Milwaukee, Wis.
BANTAM—Manipulator and automatic welding head. The Lewis Welding & Engineering Corp., Bedford, Ohio.
BANTAM—Welding torches. National Cylinder Gas Div., Chicago, Ill.
BANTAM BULLY—Pneumatic chipping and peening hammer. Superior Mfg. Co., Div., Bingham Herbrand Corp., Cleveland, Ohio
BANTAM CHAMP—DC arc welder, electric drive or generator only. Hobart Bros. Co., Troy, Ohio
BAR-LOK—C clamps. Mechanics Engineering Co., Jackson, Mich.
BARRET—Jacks. Duff Norton Mfg. Co., Pittsburgh, Pa.
BARTLETT COMPOUND LEVER—Metal cutting shears. Bartlett Manufacturing Co., Detroit, Mich.
BASAR—Anti-rust compound. Bay State Abrasive Products Co., Westboro, Mass.
BASCO—Welders' clothing, gloves and protective garments. Boston Athletic Shoe Company, Cambridge, Mass.
BASCO-TEX—Flameproof duck and neoprene and plastic aprons. Associated Bag & Apron Co., Chicago, Ill.
BASIC—Hardfacing flux. Superweld Corp., North Hollywood, Calif.
BAYFLEX—Abrasive disc-wheels. Bay State Abrasive Prod. Co., Westboro, Mass.
BAY STATE—Grinding wheels, lapping stones, polishing wheels and abrasive bricks. Bay State Abrasive Products Co., Westboro, Mass.
BEAMOGRAPH—Flame cutting machine. Air Reduction Sales Co., New York, N. Y.
BEAVER—Pipe and bolt threading tools and machines. Beaver Pipe Tools, Inc., Warren, Ohio
BEAVER—Portable flame-cutting machine. The Burdett Oxygen Co., Cleveland, Ohio
BECKER BROS.—Replacement carbon brushes. Becker Bros. Carbon Co., Cicero, Ill.
BEETLE—Motor driven carriage for welding and cutting torches. National Cylinder Gas Div., Chicago, Ill.
BEFCO—Cast iron, cast aluminum and cast manganese bronze welding rods. Bierman-Everett Foundry Co., Irvington, N. J.
BEL-AIR—Air valves. The Bellows Co., Akron, Ohio
BELCON—Selenium rectifiers. Bogue Electric Mfg. Co., Paterson, N. J.
BELDEN—Welding cable and power supply cable. Belden Mfg. Co., Chicago, Ill.
BELL TOP—Torch lighters and flints. Flint Products Co., Brooklyn, N. Y.
BELMONT—Metals. Belmont Smelting & Refining Works, Inc., Brooklyn, N. Y.
BELMONT—Sand blasting and wet blasting equipment. Vacu-Blast Co., Inc., Belmont, Calif.
BEMISWALL—Fireproof partitions. Bemis Bros. Bag Co., St. Louis, Mo.
BEN-NEK—Electrode holder. Ben-Nek Holder, Inc., Branford, Conn.
BERGEN—Pipe supports. Bergen Pipe Support Corp., New York, N. Y.
BERGER—Steel work benches and lockers. Berger Mfg. Div. of Republic Steel Corp., Canton, Ohio
BERGSTROM—Portable hardness tester, microscope, rotary drill bits, strip for cat pads. Industrial Overlay Metals, Inc., Eaton, Ohio
BERKELEY—Continuous longitudinal seam welder. Penn Tool & Machine Co., Danville, Ill.
BERNARD—Arc welding equipment and accessories. Bernard Welding Equipment Co., Chicago, Ill.
BERYLCO—Electrodes. Beryllium Corp., Reading, Pa.
BERYL-TRODE—Copper-base alloy electrode. Ampco Metal, Inc., Milwaukee, Wis.
BESLY TITAN—Abrasive wheels, discs. Besly-Welles Corp., Beloit, Wis.
BEST—Water hardening tool steel. Disston Div., H. K. Porter Co., Inc., Philadelphia, Pa.
BEST YET—Coated cover lens and plates. Sellstrom Mfg. Co., Palatine, Ill.
BETA FLUX—Electrode coating material. Foote Mineral Co., Inc., Philadelphia, Pa.
BETTERWELD—Cast iron welding flux. Victor Equipment Co., San Francisco, Calif.
BIG BERTHA—Preheating torch. L. B. White Co., Onalaska, Wis.
BIG BROTHER—250 amp DC air cooled welder. Hobart Bros. Co., Troy, Ohio.
BIG BRUTE—Welding ground clamp. Mueller Electric Co., Cleveland, Ohio.
BIG BULLY—Pneumatic hammer. Superior Mfg. Co., Div., Bingham Herbrand Corp., Cleveland, Ohio.
BIG CHIEF—Heavy-duty pedestal. Cayuga Machine & Fabricating Co., Inc., Depew, Buffalo, N. Y.
BIG CHIEF—Steel tape rule. Carlson Rules & Measures, Monrovia, Calif.
BIG GEORGE—Welding Fixture. Cecil C. Peck Co., Cleveland, Ohio
BIG THREE—Oxyacetylene and electric arc welding equipment, welding rods, electrodes, and acces- Welding Equipment Co., Fort Worth, Texas.
sories, and oxygen and acetylene. Big Three
BIG WHEELER—300 amp DC self-propelled welder. Hobart Bros. Co., Troy, Ohio.
BINGO—Soldering & Brazing tips. Beaverdell Co., Phoenix, Arizona
BIRDSELL—A-c arc and spot welders; carbon arc torches. Birdsell Manufacturing Co., Inc., Palo Alto, Calif.
BISCO—Welding electrodes. Bisett Steel Co., Cleveland, Ohio
BLACK & DECKER—Portable electric tools. Black & Decker Mfg. Co., Towson, Md.
BLACK DEVIL—Welding electrodes. The Champion Rivet Co., Cleveland, Ohio
BLACK PANTHER—Twist drills. Cogsdill Twist Drill Co., Detroit, Mich.
BLANC—Liquid solder paste. Farrelloy Co., Phila., Pa.
BLASTFOE—Sand blasting helmets and masks. Mine Safety Appliance Co., Pittsburgh, Pa.
BLAZECRETE—Castable refractories. Johns-Manville, New York, N. Y.
BLINKER—Arc welding helmets. Welding Apparatus Co., Chicago, Ill.
BLUE BRUTE—Portable air compressor. Worthington Corp., Plainfield, N. J.
BLUE CENTER STEEL—Wire rope. John A. Roebling's Sons Co., Trenton, N. J.
BLUEDAC—Mild steel electrode. Champion Rivet Co., Cleveland Ohio
BLUE DEVIL—Mild steel electrodes. The Champion Rivet Co., Cleveland, Ohio
BLUE DEVIL 85—Low alloy electrodes. The Champion Rivet Co., Cleveland, Ohio
BLUE END—Wood folding rule. Master Rule Mfg. Co., Middletown, N. Y.
BLUE FLASH—Abrasive disc wheels. Bay State Abrasive Products Co., Westboro, Mass.
BLUE NOSE—File, handles. American Stamping Co., Battle Creek, Mich.
BLUE ROD No. 40—Cast iron welding electrodes. Marquette Mfg. Co., Minneapolis, Minn.
BLUE STRIPE—Silicon carbide papers and cloths. Clover Manufacturing Co., Norwalk, Conn.
BLULINE—Welding lens. Sellstrom Mfg. Co., Palatine, Ill.
BLUWELD—Electrode drying oven. Fred C. Archer, Inc., Milwaukee, Wis.
BODYGARD—Helmets, face shields, hats and caps. American Industrial Safety Equipment Co., Inc., Cleveland, Ohio.
BODY-GUARD—Welding helmets and gloves. Burdett Oxygen Co., Cleveland, Ohio
BONALOY—Hand tools. Bonney Forge & Tool Works, Allentown, Pa.
BOND ROD—Ground clamp. H. B. Sherman Mfg. Co., Battle Creek, Mich.
BONNEY—Drop forged welding flanges. Bonney Forge and Tool Works, Allentown, Pa.
BORCOTE—Organic filler for welding electrode coating. Foote Mineral Co., Philadelphia, Pa.
BORIUM—Tungsten carbide inserts and sand blast nozzles. Stoody Co., Whittier, Calif.
BOROD—Hardfacing rods and electrodes. Stoody Co., Whittier, Calif.
BOROLON—Grinding wheels. Simonds Abrasive Co., Philadelphia, Pa.
BOYCE—Centering head for pipe work. Contour Marker Corp., Compton, Calif.
BRASSWELD—Powdered brass flux for brazing steel, malleable iron and brass. Sight Feed Generator Co., West Alexandria, Ohio
BRAZ-CAST—Bronze brazing flux. Anti-Borax Compound Co., Fort Wayne, Ind.
BRAZE-CLAD—Silver brazing alloy clad metals. American Silver Co., Flushing, N. Y.
BRAZ-WELD—Self fluxing brazing rods. Krembs & Co., Chicago, Ill.
BRAZALL—Flux. F. R. Faulk Equip. Sales, Pittsburgh, Pa.
BRAZALOY—Welding and brazing alloys and fluxes. All-State Welding Alloys Co., Inc., White Plains, N. Y.
BRAZEWELD—Bronze electrode. Lincoln Electric Co., Cleveland, Ohio
BRAZEWELL—Flux used for bronze welding. Canadian Liquid Air Co., Ltd., Montreal, Que., Canada
BRAZO FLUX—Flux for bronze-welding and brazing. The Linde Co., New York, N. Y.
BREN-WELD—Arc and spot welders and sand blast machines. Brennen, Bucci & Weber, Inc., New York, N. Y.
BRIDGEPORT—Bronze welding and brazing alloys. Bridgeport Brass Co., Bridgeport, Conn.
BRIDGEPORT—Chains. Bridgeport Chain & Mfg. Co., The, Bridgeport, Conn.
BRIGGS—Air operated, portable, automatic spot-welder. Briggs Mfg. Co., Detroit, Mich.
BRIGHT 110G—High carbon steel welding rod. Central Steel and Wire Co., Chicago, Ill.
BRIGHT BOY—Rubber abrasives, metal cleaners and polishers. Weldon Roberts Rubber Co., Newark, N. J.
BRISTOL'S—Time recorders, pyrometers and recording instruments. Bristol Co., Waterbury, Conn.
BRITEBLADE—Steel tape rule. Master Rule Mfg. Co., Middletown, N. Y.
BRONCO 60 CERTIFIED—Welding cables. Western Insulated Wire Co., Los Angeles, Calif.
BRONZ-ARC—Bronze electrode. American Arc Welders, Inc., Roseau, Minn.
BRONZE-ARC—Bronze and copper electrodes. Alloy Rods Co., York, Pa.
BRONZE-ARC—Manganese & phosphor bronze electrodes. Alloy Rods Co., York, Pa.
BRONZE DEVIL—Bronze electrode. Champion Rivet Co., Cleveland, Ohio
BRONZE-ROD No. 61—Bronze welding electrode. Marquette Mfg. Co., Minneapolis, Minn.
BRONZEND—Bronze-alloy electrodes. Arcos Corp., Philadelphia, Pa.
BRONZEWELD—Brazing fluxes for cast iron and steel. Alfco Labs, Chicago, Ill.
BRONZEWELD—Powdered bronze flux for brazing bronze, cast iron and steel. Sight Feed Generator Co., West Alexandria, Ohio
BRONZKOTE—Flux coated bronze rod. Central Steel and Wire Co., Chicago, Ill.
BRONZOCHROM—Bronze welding rods. Eutectic Welding Alloys Corp., Flushing, N. Y.
BRONZOLATEM—Low fuming brazing rods. Permalatem Welding Alloys Co., Red Bank, N. J.
BROWN—Chains. Bridgeport Chain Mfg. Co., The, Bridgeport, Conn.
BROWNIE—Steel tape rule. Master Rule Mfg. Co., Middletown, N. Y.
BROWNING—Cutting and heating torches. Worcester Taper Pin Co., Worcester, Mass.
BRUNNER—Air compressors and refrigeration units. Brunner Mfg. Co., Utica, N. Y.
BUCKEYE—Coil chain. The Cleveland Chain & Mfg. Co., Cleveland, Ohio
BUCKEYE—Portable air tools, portable electric tools, (hi-frequency only). Buckeye Tools Corp., Dayton, Ohio
BUCKEYE—Rigid steel conduit. The Youngstown Sheet and Tube Co., Youngstown, Ohio.
BUDA—Diesel-electric and gasoline-electric generator sets. Buda Div., Allis-Chalmers Mfg. Co.
BUDDY—Steel tape rule. Carlson Rules & Measures, Monrovia, Calif.
BUDDY BOY—200 amp DC air cooled engine. Hobart Bros. Co., Troy, Ohio.
BUDGIT—Electric hoists, chain blocks, cord reels, trolleys and crane assemblies. Manning, Maxwell & Moore, Inc., Muskegon, Mich.
BUFFALO—Fans, benders, sheers, blowers, collectors, exhausters and bending rolls. Buffalo Forge Co., Buffalo, N. Y.
BUILDUP—Tough base buildup rod. Industrial Overlay Metals, Inc., Eaton, Ohio.
BULL DOG—Marking machine. Acromark Co., Elizabeth, N. J.
BULLDOG—Weldors' gloves. Kirschner Gloves, Inc., Oconto, Wis.
BULLDOG—A-C arc welder. Mid-States Welder Mfg. Co., Chicago, Ill.
BULLDOG—Tractor grip-lugs, repointer bars,grouser bolts and nuts, applicator bars, etc. Allied Steel & Tractor Prod. Corp., Cleveland, Ohio
BULLARD—Respirator. E. D. Bullard Co., Sausalito, Calif.
BULL-GRIP—Liquid flux. Swiss Laboratory, Cleveland, Ohio
BULLS-EYE—Welding gloves and protective clothing. Universal Leather Co., Berlin, Wis.
BULL'S HEAD—Flint abrasive. Armour & Co., Alliance, Ohio
BULLY BLOW GUN—Blow gun. Superior Mfg. Co., Div., Bingham Herbrand Corp., Cleveland, Ohio
BUMBLE BEE—A-c welder. Air Reduction Sales Co., New York, N. Y.
BUNELL—Special tools, dies, jigs, fixtures and special machines. Bunell Machine & Tool Co., Cleveland, Ohio
BUNDYWELD—Steel tubing, Monel tubing, and nickel tubing. Bundy Tubing Co., Detroit, Mich.
BURDOX—Line of oxyacetylene welding and safety

equipment. Burdett Oxygen Company, Cleveland, Ohio

BURNER'S AID—Circle cutter for manual flame-cutting torches. Arcair Co., Lancaster, Ohio

BURRO—Locomotive crane. Cullen-Friestadt Co., Chicago, Ill.

BURT-WELD—Welding lens. B. F. McDonald Co., Los Angeles, Calif.

BUSYBEE—A-c arc welder. Air Reduction Sales Co., New York, N. Y.

BUTT ON SPOT—Butt welding attachment. Robert W. Hoffman Co., Inc., Chicago, Ill.

BUX—Magnetic plate clamp. Buck Mfg. Co., San Jose, Calif.

C

C-5—Cutting torch. Harris Calorific Co., Cleveland, Ohio

C-30—Hardfacing electrode. The Champion Rivet Co., Cleveland, Ohio

CCC METAL—Welding tips for spot welding machines. American Electric Fusion Corp., Chicago, Ill.

CEE—Aluminum "C" clamps. Foster Alum. Alloy Prod. Corp., Forestville, N. Y.

C-F—Welding positioners and sheet lifters. Cullen-Friestedt Co., Chicago, Ill.

C-H—Magnetic and electronic timers, contactors and accessories. Cutler-Hammer, Inc., Milwaukee, Wis.

C&L—Blow torch and air pots. Clayton & Lambert Mfg. Co., Louisville, Ky.

CM-50—Alloy electrode. Harnischfeger Corp., Milwaukee, Wis.

CMD—Chipping hammers. Chicago Mfrs. & Distributing Co., Chicago, Ill.

CMD TEXTITE—Air separators, (filters). Chicago Mfg. & Distributing Co., Chicago, Ill.

CP—Pneumatic tools, weld flux chippers, scaling tools, hose couplings and files. Chicago Pneumatic Tool Co., New York, N. Y.

CR—Air control valve. Eclipse Fuel Engineering Co., Rockford, Ill.

CS—Nickel and copper welding electrode. Tennessee Fabricating Co., Memphis, Tenn.

CV—Constant voltage d-c welder. Hobart Bros. Co., Troy, Ohio

CW-45—Cutting attachment for conversion of blowpipe into cutting torch. Linde Co., New York, N. Y.

CABLE KING—Wire rope, electric hoist. The Yale & Towne Mfg. Co., Philadelphia, Pa.

CABLEHITCH—Welding cable hanger. Jackson Products, Air Reduction Sales Co., Warren, Mich.

CABLE-TITE—Cable connectors. National Cylinder Gas Div., Chicago, Ill.

CADDY—Arc welding accessories. Erico Products, Inc., Cleveland, Ohio

CADET—Flame cutting machines and tips. American Pullmax Co., Inc., Chicago, Ill.

CADILLAC—Blower-suction cleaners, hot or cold air blower, blowtorch, and furnace efficiency boosting blower. Clements Mfg. Co., Chicago, Ill.

CADWELD—Electrical connections. Erico Products, Inc., Cleveland, Ohio

CALDER—Grinding wheel, dressers and cutters. Calder Mfg. Co., Lancaster, Pa.

CALOBAR—Filter glass plates and lenses. American Optical Co., Southbridge, Mass.

CAM-LOK—Cable connectors and lugs; electrode holders and vulcanizing kits. Cam-Lok Div., Empire Prod., Inc., Cincinnati, Ohio

CAMOGRAPH—Oxyacetylene cutting machine. Air Reduction Sales Co., New York, N. Y.

CAMPBELL—Abrasive cutting machines. Campbell Machine Div. of American Chain & Cable Co., Inc., Bridgeport, Conn.

CAMPBELL—Chain. International Chain & Mfg. Co., York, Pa.

CANADIAN—Calcium carbide. Shawinigan Products Corporation, New York, N. Y.

CANALLOY—Hardfacing electrodes and welding rods. Canton Alloys, Inc., Canton, Ohio

CARBIC—Calcium carbide and floodlights. The Linde Co., New York, N. Y.

CARBO—Oxygen, carbo-hydrogen, welding and cutting equipment, welding supplies and accessories. National Cylinder Gas Div., Chicago, Ill.

CARBO—Baked carbons. Hobart Brothers Co., Troy, Ohio

CARBOFLEX—Grinding wheels. The Carborundum Co., Niagara Falls, N. Y.

CARBOFRAX—Refractories. The Carborundum Co., Niagara Falls, N. Y.

CARBO-HYDROGEN—Fuel gas for welding and cutting. National Cylinder Gas Div., Chicago, Ill.

CARBOLITE—Calcium carbide. The Linde Co., New York, N. Y.

CARBONAIRE—1200 amp cutting and gouging unit. Hobart Bros. Co., Troy, Ohio

CARBON-MOLY 50—Electrode. Metal & Thermit Corp., Rahway, N. J.

CARBON PUTTY—Carbon compound. Smith Welding Equipment Corporation, Minneapolis, Minn.

CARBORA—Grinding wheels and abrasive products. Cortland Grinding Wheels Corp., Chester, Mass.

CARBORUNDUM—Bonded abrasives and coated abrasives. The Carborundum Co., Niagara Falls, N. Y.

CAREND—A-C welding electrode. Arcos Corp., Philadelphia, Pa.

CARILLOY—Alloy steels. United States Steel Corp., Pittsburgh, Pa.

CAROL—Welding cable. Carol Cable Co., Pawtucket, R. I.

CAROLUS—Bolt, rod and wire cutters. Manco Mfg. Co., Bradley, Ill.

CARPENTER—Stainless steel bars, strip, drill rod, welded tubing, welding rods, tool steel, alloy steel, etc. Carpenter Steel Co., Reading, Pa.

CARPENTER STAINLESS No. 20—Wire for weld rods. The Carpenter Steel Co., Reading, Pa.

CARRYALL—Rack to transport welding equipment. National Cylinder Gas Div., Chicago, Ill.

CASH-ACME—Regulators and valves. A. W. Cash Valve Manufacturing Corp., Decatur, Ill.

CASTALOY—Cast to shape bucket repointers. Industrial Overlay Metals, Eaton, Ohio

CASTINGWELD—Electrode for welding cast iron. Westinghouse Electric Corp., Pittsburgh, Pa.

CAST-I-NICKEL—Electrode for cast iron welding. Champion Rivet Co., Cleveland, Ohio

CAST-I-STEEL—Electrode for cast iron welding. Champion Rivet Co., Cleveland, Ohio

CASTOLIN—Cast-iron welding rods. Eutectic Welding Alloys Corp., Flushing, N. Y.

CASTOMATIC—Bar Solder. Federated Metals Div., American Smelting & Refining Co., New York, N. Y.

CASTOX—Welding rod and flux. Central Steel & Wire Co., Chicago, Ill.

CAST-ROD No. 42—Electrode. Marquette Mfg. Co., Minneapolis, Minn.

CASTWELD—For welding cast-iron. Rankin Mfg. Co., Los Angeles, Calif.

CAYUGA-MATIC—Automatic welding equipment. Cayuga Machine & Fabricating Co., Inc. Buffalo, N. Y.

CAYUGA-VAC—Arc melting furnaces and vacuum vessels. Cayuga Machine & Fabricating Co., Inc., Buffalo, N. Y.

CENTRI-MERGE—Dust collector. Schmieg Industries, Inc., Detroit, Mich.

CENT-R-LINE—Turning rolls. Cecil C. Peck Co., Cleveland, Ohio

CENTURY—Automatic welding machines and holding fixtures. Century Engineering Co., Clifton, N. J.

CERTAIN CURTAIN—Electric heat treating furnaces. C. I. Hayes, Inc., Cranston, R. I.

CERTIFIED—Stainless steel electrodes. McKay Co., Pittsburgh, Pa.

CESCO—Goggles, helmets, face shields, respirators. Chicago Eye Shield Co., Chicago, Ill.

CESCOWELD—Glass for lenses and in plate form for welding goggles and helmets for oxyacetylene and electric welding. Chicago Eye Shield Co., Chicago, Ill.

CHAIN-O-FLEX—Overhead conveyor. Industrial Equipment Co., Chicago, Ill.

CHALLENGE—Lapping plates, layout surface plates, bench plates, work benches, surface plate, straight edges, solid parallels, box parallels, angle plates, V blocks and abrasive cut off machines. Challenge Machinery Co., Grand Haven, Mich.

CHALLENGE—Steel tapes. Lufkin Rule Co., Saginaw, Mich.

CHALLENGER—A-c welder. A. O. Smith Corp., Welding Products Division, Milwaukee, Wis.

CHALLENGER—Spur gear hoist. Coffing Hoist Co., Danville, Ill.

CHAM-CUT—Electric-arc electrode. Pacific Welding Alloys Co., Inc., Los Angeles, Calif.

CHAMFERTRODE—Gouging electrode. Eutectic Welding Alloys Corp., Flushing, N. Y.

CHAMP—Electric arc welder. Precision Welder Mfg. Co., Chicago, Ill.

CHAMPION—Welding and safety goggles. American Industrial Safety Equipment Co., Inc., Cleveland, Ohio

CHAMPION—Electrodes. The Champion Rivet Company, Cleveland, Ohio

CHAMPION—Pipe vise stand. Nye Tool & Machine Co., Chicago, Ill.

CHAMPION—A-c welder. A. O. Smith Corp., Welding Products Div. Milwaukee, Wis.

CHAMPION—Welding goggles, lens. Burdett Oxygen Co. Cleveland, Ohio

CHAMPION AIRCRAFT—Electrodes for air craft welding. The Champion Rivet Co., Cleveland, O.

CHAMPION DE ARMENT—Hammers, chiseles, etc. Champion DeArment Tool Co., Meadville, Pa.

CHASE—Brass, bronze, and copper products. Chase Brass & Copper Co., Inc., Waterbury, Conn.

CHEEPEE—Plastic goggles. Watchemoket Optical Co. Providence, R. I.

CHEK-SHOCK—Cushion for protecting regulators and valves on oxygen, hydrogen and other high pressure gas systems. Chek-Shock Mfg. Co., Fowler, Calif.

CHELSEA—Ventilating fans and blowers. Chelsea Fan & Blower Co., Inc., Plainfield, N. J.

CHEMALLOY—Fluxless aluminum solder and welding rod. Chemalloy Electronics, Inc., Santee, Calif.

CHEMCLEAN—Liquids for removing burn and stain caused by welding. Chemclean Products Corp., Brooklyn, N. Y.

CHERRY HEAT—Forge welding compound. Anti-Borax Compound Co., Inc., Fort Wayne, Ind.

CHICAGO GRINDING—Grinding wheels. Chicago Wheel & Mfg. Co. Chicago, Ill.

CHICAGO MOUNTED—Mounted wheels. Chicago Wheel & Mfg. Co., Chicago, Ill.

CHIEF—Steel tape rule. Carlson Rules & Measures, Monrovia, Calif.

CHIEFTAIN—Automatic-welding fixture. Cayuga Machine & Fabricating Co., Inc., Depew-Buffalo, N. Y.

CHILL RING—Weld back-up rings. Wedge Protectors, Inc., Cleveland, Ohio

CHIP-BAN—Safety glasses. Bausch & Lomb Optical Co., Rochester, N. Y.

CHIP-WELD—Combination welding and chipping goggle. Willson Products, Inc., Reading, Pa.

CHROMANG—Austenitic electrodes. Arcos Corp., Philadelphia, Pa.

CHROME-CLAD—Steel tapes. Lufkin Rule Co., Saginaw, Mich.

CHROME MOLY—Welding rod. Central Steel & Wire Co., Chicago, Ill.

CHROME VANOX—Alloy welding rod. Central Steel and Wire Co., Chicago, Ill.

CHROMEFACE—Austenitic high chromium iron hardfacing rods. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.

CHROMEHARD—Hardfacing electrodes. Shober Inc., Stockton, Calif.

CHROMO-LOY—Chrome-nickel hardfacing rod. Resisto-Loy Co., Inc., Grand Rapids, Mich.

CHROMOLY—Series of high tensile electrodes. Champion Rivet Co., Cleveland, Ohio

CINCH—Steel cement. Claud S. Gordon Co., Chicago, Ill.

CIRCLE—Hose clamp. Air Reduction Co., New York, N. Y.

CIRCLE MIXER—Mixing device in oxy-acetylene torches. Modern Engineering Co., St. Louis, Mo.

CLAMP MASTER—Clamps. Grand Specialties Co., Chicago, Ill.

CLAMPCUT—Milling machine vice and milling cutter. J & S Tool Co., Inc., Livingston, N. J.

CLARK—Electric drills and sanders. James Clark, Jr. Electric Co., Louisville, Ky.

CLASP—Welding cable disconnect splice. Burndy Engineering Co., Inc., Norwalk, Conn.

CLEAN WELD—Welding and brazing wires. Aluminum Wire Products Co., Inc., Glastonbury, Conn.

CLECO—Pneumatic chippers, hammers and scaling tools. Cleco Div., Reed Roller Bit Co., Houston, Texas

CLEEPEE—Goggles (one piece). Watchemoket Optical Co., Inc., Providence, Rhode Island.

CLE-FORGE—High-speed drills. The Cleveland Twist Drill Co., Cleveland, Ohio.

CLEANWELD—Spatter resisting compound. Hobart Bros. Co., Troy, Ohio

CLEMCO—Sandblasting equipment. Clementina, Ltd., San Francisco, Calif.

CLEPO—Cleaning compounds. Frederick Gumm Chemical Co., Kearny, N. J.

CLETALOY—Material for resistance welding electrodes. Cleveland Tungsten, Inc., Cleveland, Ohio

CLE-TUNG—Tungsten electrode, atomic hydrogen and inert arc electrodes. Cleveland Tungsten, Inc., Cleveland, Ohio

CLEVELAND TRAMRAIL—Overhead materials handling equipment. The Cleveland Crane and Engineering Co., Wickliffe, Ohio.

CLEVE-TUNG—Welding products. Cleveland Tungsten, Inc., Cleveland, Ohio

CLIMAX—Forge welding compound. Anti-Borax Compound Co., Inc., Fort Wayne, Ind.

CLINTON—Wire cloth. Wickwire Spencer Steel Div., The Colorado Fuel & Iron Corp., New York, N. Y.

CLOVER—Abrasive papers and cloths, and lapping compounds. Clover Mfg. Co., Norwalk, Conn.

CLOVER—Crayons for marking of metals. Whittaker, Clark & Daniels, Inc., New York, N. Y.

C-O TWO—Fire extinguisher equipment. C-O Two Fire Equipment Co., Newark, N. J.

COAST METALS—Powder welding alloys, brazing alloys, hard facing electrodes and rods, and automatic welding wire. Coast Metals, Inc., Little Ferry, N. J.

COATED TUBE STOODITE—Hard-facing electrode. Stoody Co., Whittier, Calif.

COBALT—Lens. American Optical Co., Southbridge, Mass.

COFFING—Hoists. Coffing Hoist Co., Danville, Ill.

COGMATIC—Machines, sprockets and gears. Seaman-Andwall Corp., Cogmatic Div., Milwaukee, Wis.

COLALLOY—Flux coated and uncoated welding rods. Colonial Alloys Co., Philadelphia, Pa.

COLAWELD—Flux paste, reaction solder rod. Colonial Alloys Co., Philadelphia, Pa.

COLCAP—Helmet liners for top of head. Jackson Products, Inc., Warren, Mich.

COLDARC—Electrodes. Eutectic Welding Alloys Co., Flushing, N. Y.

COLDWELL—Low temperature welding alloy. Eutectic Welding Alloys, Inc., Flushing, N. Y.

COLLYER—Welding cables. Collyer Insulated Wire Co., Inc., Pawtucket, R. I.

COLMONOY—Hardfacing alloys and powder. Wall Colmonoy Corp., Detroit, Mich.

COLMONOY SPRAYWELDER—Powder metallizing gun. Wall Colmonoy Corp., Detroit, Mich.

COLMONOY SWEAT-ON PASTE—Abrasion resistant paste Wall Colmonoy Corp., Detroit, Mich.

COLONIAL—Semi-finished form, sheets, rods, tubes, wire. Colonial Alloys Co., Philadelphia, Pa.

COLONIAL—Leather welders' wearing apparel. Colonial Leather Co., Milwaukee, Wis.

COLONIAL—Compressed gases. New England Gas Products, Inc., Charleston, Mass.

COLOR-GLANCE—Brinell hardness tester. Steel City Testing Machines, Inc., Detroit, Mich.

COLOR HELMET—Arc welding helmet. Thermacote Co., Los Angeles, Calif.

COLOR-STRIPE—Coated abrasive papers and cloths. Clover Manufacturing Co., Norwalk, Conn.

COLUMBIA—Tong test ammeter (a-c & d-c). Columbia Electric Mfg. Co., Cleveland, Ohio

COLUMBIAN—Vises and levels. Columbian Vise Mfg. Co., Cleveland, Ohio

CO-MANG—Build-up austenitic manganese steel rod. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.

C-OMANUAL—Semiautomatic CO_2 shielded welding process, with hand gun. A. O. Smith Corp., Milwaukee, Wis.

C-OMATIC—Automatic CO_2 shielded welding process. A. O. Smith Corp., Milwaukee, Wis.

COMBO-TOOL—Grinders, (electric, portable). Porter-Cable Machine Co., Syracuse, N. Y.

COMET—Electric arc welder. Precision Welder Mfg. Co., Chicago, Ill.

COMET—Electric hoist. Chisholm-Moore Hoist Corp., Tonawanda, N. Y.

COMET—Coated abrasives. Clover Manufacturing Co., Norwalk, Conn.

COMET—Air-control valve. Ross Operating Valve Co., Detroit, Mich.

COMET-ARC—Powder-metal electrode. The McKay Co., Pittsburgh, Pa.

COMFO—Respirator. Mine Safety Appliances Co., Pittsburgh, Pa.

COMFORT-SHIELD—Welding head shield. Lincoln Electric Co., Cleveland, Ohio

COMMANDO—Jigs, positioners, tip cleaners, soldering tips, aluminum brazing rod and solder, white metal rod, flints and torch lighters, soapstone holders and hand cleaner. J. M. Ragle, Industries., Kansas City, Mo.

COMMERCIAL—Acetylene, argon, helium, oxygen and hydrogen. Commercial Gas Corp., Wilkes-Barre, Pa.

COMMERCIAL—A-c arc welders. Electric Arc, Inc., Newark, N. J.

COMMERCIAL BUTANE—Auxiliary fuel. Hope Natural Gas Co., Clarksburg, W. Va.

CO-MO-TROL—Electronic vari-speed motor control. Weltronic Co., Detroit, Mich.

COMPOUND PRESSURE—Manifold assemblies. National Welding Equip. Co., San Francisco, Calif.

COMPRESS—Polishing wheels. Divine Brothers Co., Utica, N. Y.

CONCENTRIC—Projection press welder. Resistance Welder Corp., Bay City, Mich.

CONDENSIFILTER—Combination compressed air separator, condenser, filter and trap. Hankison Corp., Canonsburg, Pa.

CONDENS-O-WELD—Resistance welding control. Westinghouse Electric Corp., Pittsburgh, Pa.

CONDOR—Oxyacetylene welding hose. Manhattan Rubber Mfg. Co., Div. Raybestos-Manhattan, Inc., Passaic, N. J.

CONEFIRE—Flame-cutting tips. Texas Delta Development Corp., Lockhart, Texas

CON-NEK—Cable connector. Ben Nek Holder Co., Inc., Branford, Conn.

CONSERVO—Hose. Hewitt-Robins, Inc., Stamford, Conn.

CONSTANT-ARC—Industrial arc welders. Marquette Manufacturing Co., Inc. Minneapolis, Minn.

CONTINENTAL—Industrial furnaces. Continental Industrial Engineering, Inc., Chicago, Ill.

CONTINENTAL—Electrode holder. Welding Engineering Co., Milwaukee, Wis.

CONTOUR MARKERS—For layout on pipe and structural steel. Contour Marker Corp., Compton, Calif.

CONTOUR-MATIC—Machine tool. Do All Co., Desplaines, Ill.

CONTROLARC—Magnetic amplifier d-c rectifier welder. Vickers Electric Div., St. Louis, Mo.

COOL BAND—Sweat bands. Mine Safety Appliance Co., Pittsburgh, Pa.

COOL-CUT—Grinding wheels. Robertson Mfg. Co., Morrisville, Pa.

COOLIE—Electrode holders. Cam-Lock Div., Empire Products, Inc., Cincinnati, Ohio

COOLTONG—Insulated electrode holder. Lincoln Electric Co., Cleveland, Ohio

COPOX—Flux. Canadian Liquid Air Co., Ltd., Montreal, Canada.

COPPER-ARC—Electrodes for cast iron. American Arc Welders, Inc., Roseau, Minn.

COPPERED 5G—Welding rods. Central Steel and Wire Co., Chicago, Ill.

COPPERED 6G—Welding wire. Central Steel and Wire Co., Chicago, Ill.

COPPERHEAD—Electrode holder jaw insulators. Wagner Electric Corp., Jackson, Mo.

COPPUS—Ventilating blower, welding exhausters and exhaust fans. Coppus Engineering Corp., Worcester, Mass.

COPRCOAT—Steel wire for welding work. Allied Weld-Craft, Inc., Indianapolis, Ind.

CORODEX COIL CLEAN—Coil cleaner, lime scale remover from coils, tanks, steam tables, fountain coils, spray heads, compressor jackets, unit coolers, etc. Allied Products Co, Chicago, Ill.

CORODEX RUST REMOVER—Rust remover. Allied Products Co., Chicago, Ill.

CORTA 52—Cutting machine. The Burdett Oxygen Co., Cleveland, Ohio

COR-TEN(USS)—Chromium, copper, silicon. United States Steel Subsidiaries, Pittsburgh, Pa.

CORTEX—Grinding wheels. Cortland Grinding Wheel Corp., Chester, Mass.

CORTLAND—Fluxes and compounds. Anti-Borax Compound Co., Inc., Fort Wayne, Ind.

CORTLAND—Grinding wheels. Cortland Grinding Wheels Corp., Chester, Mass.

CORVIC BRONZE—Copper alloy. Chase Brass & Cooper Co., Inc., Waterbury Conn.

CORVITE—Polishing wheels and sticks. U. S. Rubber Co., Ft. Wayne, Ind.

COUSE—Portable welding shops. Couse Mfg., Inc., Newark, N. J.

COVERGLAS—Goggles. American Optical Co., Southbridge, Mass.

COVERSPECS—Goggles for weldors who wear spectacles. Air Reduction Sales Co., New York, N. Y.

COYNE—Acetylene Cylinders. Coyne Cylinder Co., San Francisco, Calif.

CRACKERJACK—Grinding wheel dressers. The Desmond-Stephen Mfg. Co., Urbana, Ohio

CRAFTSWELD—Oxyacetylene welding and cutting equipment and underwater accessories. Craftsweld Equipment Corp., Long Island City, N. Y.

CRAMER—Timers. R. W. Cramer Co., Inc., Centerbrook, Conn.

CRANE—Valves, pipe fitting specialties, welded pipe joints, fitting, etc. Crane Co., Chicago, Ill.

CRANELAP—Welding nipple and flange. Crane Co. Chicago, Ill.

CRESCENT—Tempering compound and forge welding compound. Anti-Borax Compounds Co., Fort Wayne, Ind.

CRESCENT—Non-preformed wire rope. American Cable Div. of American Chain & Cable Co., Inc., Wilkes-Barre, Pa.

CRESCENT—Wrenches, pliers, hacksaws, tinsnips, screwdrivers, punches, chisels. Crescent Tool Co., Jamestown, N. Y.

CRESCENT—Fire brick. North American Refractories Co., Cleveland, Ohio

CRESTOLOY—Wrenches, pliers. Crescent Tool Co., Jamestown, N. Y.

CROBALITE—Hardfacing alloys. Crobalt, Inc., Ann Arbor, Mich.

CROLOX—Alloy steel. The Babcock & Wilcox Tubular Products Div., Beaver Falls, Pa.

CROLOY—High carbon, high chrome, tool steel. Henry Disston & Sons, Inc., Philadelphia, Pa.

CROLOY—Chromium-moly electrodes. Metal & Thermit Corp., Rahway, N. J.

CROLOY—Low-alloy steel arc welding electrode. Champion Rivet Co., Cleveland, Ohio

CROMALOY—Welding flux. The Linde Co., New York, N. Y.

CROMANSIL—Alloy steel. Lukens Steel Co., Coatesville, Pa.

CROMANSIL ELECTRIC—Arc welding electrode. Metal & Thermit Corp., Rahway, N. J.

CROSS-RIB—Crusher jaws to reduce abrasive wear. Kenco, Cupertino, Calif.

CRUCIBLE—Electrodes. Crucible Steel Co. of America, Harrison, N. J.

CRUCIBLE ARC—Tool and die electrodes. C. E. Phillips & Co., Detroit, Mich.

CRUCIBLE ARC No. 600—Cast iron welding electrodes. C. E. Phillips & Co., Detroit, Mich.

CRYSTOLON—Abrasive grinding wheels and refractories. Norton Co., Worcester, Mass.

CRYSTOLON—Abrasives. Armour & Co., Alliance, Ohio

CUB—Electrode holders. Martin Wells, Inc., Los Angeles, Calif.

CUNO—Airline filters. J. N. Fauver Co., Inc., Detroit, Mich.

CUPALOY—An alloy for tips and wheels for electric resistance welding machines. Westinghouse Electric Corp., Pittsburgh, Pa.

CURLED CHIP—Metal cutting saws. E. C. Atkins & Co., Indianapolis, Ind.

CURRENTROL—Remote current control. Lincoln Electric Co. Cleveland, Ohio

CURV-O-MARK—Pipe welding aids. Contour Marker Corp., Compton, Calif.

CUSHIONED POWER—Electronic timers. Robotron Corp., Detroit, Mich.

CUT-A-LINE—Portable flame cutting machine. Indiana Oxygen Co., Indianapolis, Ind.

CUT DEVIL—Cutting electrode. Champion Rivet Co., Cleveland, Ohio

CUT-O-MATIC—Portable flame cutting machine. National Cylinder Gas Div., Chicago, Ill.

CUT-O-MATION—Machine flame cutting processes. The Harris Calorific Co., Cleveland, Ohio

CUT-ROD—Cutting electrode. Aufhauser Bros. Corp., Albertson, N. Y.

CUTLER HAMMER—Magnetic contactors, welding timers, switches and related electrical apparatus. Cutler-Hammer, Inc., Milwaukee, Wis.

CUTMASTER—Cutting torches. Modern Engineering Co. Inc., St. Louis, Mo.

CUTTEND—Arc-oxygen type electrode. Arcos Corp., Philadelphia, Pa.

CUTTRODE—Cutting electrodes. Eutectic Welding Alloys Corp., Flushing, N .Y.

CYCLONE—Spur geared hoist. Chisholm-Moore Hoist Corp., Tonawanda, N. Y.

CYCLONE—Mounted points. Robertson Mfg. Co., Morrisville, Pa.

CYCLOPS—Weld inspection equipment and gamma-ray equipment. Picker X-Ray Corp., White Plains, N. Y.

D

DB—Welding and cutting torches, regulators, supplies and accessories acetylene generators, specially designed machines for automatic welding and cutting, etc. Air Reduction Sales Co., New York, N. Y.

DH5—Powder-metal electrode. Harnischfeger Corp., Milwaukee, Wis.

DH-2—A-c, d-c electrode. Harnischfeger Corp., Milwaukee, Wis.

D NICKEL—Form of nickel. The International Nickel Co., Inc., New York, N. Y.

DV—Start-stop control, gas and water control, and arc time totalizers. DV Welding Controls, Hayward, Calif.

DALITE—Coated cover lens and goggle lens. L. H. Bullock Co., Richmond, Calif.

DALWELD—Cable connectors and cable. Dalweld Co., Mt. Vernon, N. Y.

DANDUX—Welding aprons and curtains. C. R. Daniels, Inc., New York, N. Y.

DARLING—Valves. Darling Valve & Mfg. Co., Williamsport, Pa.

DAYTON—Grinding wheels. Simonds Worden White Co., Dayton, Ohio

DAYTON SAFETY—Grinding wheels. Simonds Worden White Co., Dayton, Ohio.

DE BOTHEZAT—Exhaust fans. De Bothezat Fans Div., American Machine & Metals, Inc., East Moline, Ill.

DEFENSE—Shutoff valve. Security Valve Co., Los Angeles, Calif.

DEHYDRAFILTER—Compressed air and gas dehydrator. Hankison Corp., Canonsburg, Pa.

DEMON—Saw blade. The Do All Co., Des Plaines, Ill.

DENS-O-MATIC—Automatic welding wire. Allied Weld-Craft, Inc., Indianapolis, Ind.

DENVER—Universal flame hardener. Stearns Roger Mfg. Co., Denver, Colo.

DEOXO—Silver brazing flux. The American Platinum & Silver Div., Newark, N. J.

DERM-EEZ—Protective skin creams. A. E. Halpering Co., Inc., Boston, Mass.

DE-SCALER—Rust and scale remover. Turco Products, Inc., Los Angeles, Calif.

DE-STA-CO—Toggle clamps; shim stock, steel and brass; feeler gauge, steels, welding fixture clamps. Detroit Stamping Co., Detroit, Mich.

DESPATCH—Heat treating ovens. Despatch Oven Co., Minneapolis, Minn.

DETROIT—Hoists and cranes. Detroit Hoist & Machine Co., Detroit, Mich.

DETROIT—Portable tensile tester. Detroit Testing Machine Co., Detroit, Mich.

DE VILBISS—Airline fittings and couplings, air compressors, fans and masks. The De Vilbiss Co., Toledo, Ohio.

DE WALT—Circular metal cutting saws. De Walt, Inc., Lancaster, Pa.

D HOLE-O-GRAPH—Flame-cutting machine. Vernon Tool Co., Ltd., Alhambra, Calif.

DI-ACRO—Benders brakes, shears, notchers, punches, rod parters, hydra-power benders and vari-o-speed powershear. O'Neil-Irwin Mfg. Co., Lake City, Minn.

DI-CAST—Welding rod. Canadian Liquid Air Co., Ltd., Montreal, Que., Canada.

DIAL-AMP—A-C arc welders. Shober Inc., Stockton, Calif.

DIAL-CAL—Dial caliper. Precision Tool Sales Co., Los Angeles, Calif.

DIAL-ELECTRIC—A-c and d-c and combination a-c/d-c welders. Harnischfeger Corp., Milwaukee, Wis.

DIAMALLOY—Hard facing welding electrodes. The Diamalloy Co., Gowanda, N. Y.

DIMALOY—Unfilled tubes, tube tungsten, and abrasion strips. Industrial Overlay Metals, Inc., Eaton, Ohio

DIAMOND W—Brick fire. Quigley Co., Inc., New York, N. Y.

DIAMONITE—Welding guides and supports. Sandblast nozzles. Inert-gas welding cups. Diamonite Prods. Div., Canton, Ohio

DIAMONDWELD—Hardfacing electrodes. A. O. Smith Corp., Welding Products Division, Milwaukee, Wis.

DIDYMIUM—Lenses. American Optical Co., Southbridge, Mass.

DIGITRONIC—Resistance welder control using counting tubes. Weltronic Co., Detroit, Mich.

DILLON—Portable tensile testing machines. W. C. Dillon and Co., Van Nuys, Calif.

DILUTERS—For pre-mixing gas. Eclipse Fuel Eng. Co., Rockford, Ill.

DIMALOY—Tungsten tube carbide. Industrial Overlay Metals, Eaton, Ohio

DIRECTAIR—Air control valves. Hannifin Corp., Des Plaines, Ill.

DIRTY WORK—Flux. L. B. White Co., Onalaska, Wis.

DISC-CENTER—Wire wheel brushes. The Osborn Manufacturing Co., Cleveland, Ohio

DISKETTE—Portable electric tools. N. A. Strand Div. Franklin Balmar Corp., Baltimore, Md.

DIVCO—Alloys, tinning compounds, fluxes, solders, and metallizing wires. Division Lead Co., Summit, Ill.

DIVERSEY—Metal cleaners. The Diversey Corp., Metal Industries Dept., Chicago, Ill.

DIVINE—Abrasive belt grinding and polishing machine, polishing and buffing wheels, machinery and supplies. Divine Bros. Co., Utica, N. Y.

DIXON—Graphite rods and plate. Joseph Dixon Crucible Co., Jersey City, N. J.

D-LUX—Plastic goggles. Watchemoket Optical Co., Providence, R. I.

DO-ALL—Contour and high speed sawing machines; saw bands, surface grinders, butt welders, band filing machines, band files and welding machines. The Do-All Company, Des Plaines, Ill.

DO-ALL—Portable electric tool. Wodack Electric Tool Corp., Chicago, Ill.

DO-ALL ZEPHYR—High speed band saws. Do-All Co., Des Plaines, Ill.

DOC ALLOY KIT—Maintenance and sampler kit. All-State Welding Alloys Co., Inc., White Plains, N. Y.

DOCKSON—Welding and safety equipment. Dockson Corp., Detroit, Mich.

DOUBLEL—Sandblast nozzles. Diamonite Products Div., Canton, Ohio

DOWMETAL—Magnesium alloys. The Dow Chemical Co., Midland, Mich.
DRAWALLOY—Spooled welding wire. Drawalloy Corp., York, Pa.
DREDNAUT—Welding and chippers goggle. American Optical Co., Southbridge, Mass.
DRIOX—Oxygen and nitrogen. The Linde Company, New York, N. Y.
DRY-CRISP—Rust preventive. Merix Chemical Co., Chicago, Ill.
DRYGALV—Zinc coating (paint). American Solder & Flux Co., Philadelphia, Pa.
DRYROD—Electrode drying and storage ovens. Phoenix Prod. Co., Milwaukee, Wis.
DRYSEAL—Refrigeration copper tube. Revere Copper & Brass, Inc., New York, N. Y.
DUALARC—D-c welding equipment. Electric Arc Inc., Newark, N. J.
DUAL-CASE—Weldor's case for welding rods & chipping tools. Atlas Welding Accessories, Inc., Ferndale, Mich.
DUAL GRIP—"C" clamps. Grand Specialties Co., Chicago, Ill.
DUAL HOSE—Twin hose. Burdett Oxygen Co., Cleveland, Ohio.
DUAL-HOSE—Welding hose. National Cylinder Gas Div., Chicago, Ill.
DUAL-LOCK—Shutoff valve. Eclipse Fuel Eng. Co., Rockford, Ill.
DUAL SHIELD—Automatic welding equipment. National Cylinder Gas Div., Chicago, Ill.
DUAL-TOOL—Combination weld cleaning tool. Atlas Welding Accessories Inc., Ferndale, Mich.
DUBBL-STAGE—Welding regulators. Modern Engineering Co., Inc., St. Louis, Mo.
DUMORE—Grinders and flexible shaft machines. Dumore Co., Racine, Wis.
DUMPER—Portable and stationary material lifts. Grand Specialties Co., Chicago, Ill.
DUO CONTROL—Oxygen pressure regulator for machine cutting. The Harris Calorific Co., Cleveland, Ohio
DUOGRAPH—Automatic power driven cutting machine. Air Reduction Sales Co., New York, N. Y.
DUO-SQUARE—Welding positioner. McFerron-Myers Products Co., Cleveland, Ohio
DUO-TROL—Combined heat control and magnetic welding timer. National Time and Signal Corp., Detroit, Mich.
DUO-TROL—Two-stage regulator. Weldit, Inc., Detroit, Mich.
DUOWELD—Oxyacetylene hose. B. F. Goodrich Co., Akron, Ohio
DUPLEX—Welding and cutting torches. K-G Equipment Co., Inc. Allentown, Pa.
DUPLEX—Hand grinder. Dumore Co., Racine, Wis.
DUPLEX-TANDEM—Regulator. Modern Engineering Co., St. Louis, Mo.
DUPLICUTTER—Lightweight portable flamecutting machine. Victor Equipment Co., San Francisco, Calif.
DURA-BILT—Rotary wire wheelbrush. The Milwaukee Brush Mfg. Co., Milwaukee, Wis.
DURACUT—Abrasive disc-wheel. Bay State Abrasive Products Co., Westboro, Mass.
DURADIANT—Radiant ceramic gas burners. Selas Corp. of America, Dresher, Pa.
DURAFLEX—Arc welding cable. Westinghouse Electric Corp., Pittsburgh, Pa.
DURAGARD—Chipping goggles. American Optical Co., Southbridge, Mass.
DURALATEM—Hardfacing rods, Perma-latem Welding Alloys, Inc., Red Bank, N. J.
DURALITE—Chippers goggles. American Optical Co., Southbridge, Mass.
DURAGARDE—Fire extinguisher. Pyrene Manufacturing Co., Newark, N. J.
DURALOY—Chrome-iron, chrome-nickel-steel, and nickel-chrome-steel alloys, Duraloy Co., Scottdale, Pa.
DURATEX—Utility fireproof curtains. Duracote Corp., Ravenna, Ohio
DURAWELD—Weldor's goggles. American Optical Co., Southbridge, Mass.
DURITE—Silicon carbide coated abrasive. Behr-Manning Corp., Troy, N. Y.
DURO—Electrode holders. Duro Engineering Co., Hamden, Conn.
DURO-LITE—Lightweight electrode holder. Duro Engineering Co., Hamden, Conn.
DURONZE—Silicon bronze. Bridgeport Brass Co., Bridgeport, Conn.
DUSKOLECTORS—Filter type cyclone and dust collectors. Hammond Machinery Builders, Inc., Kalamazoo, Mich.
DUST-BAN—Safety goggles. Bausch & Lomb Optical Co., Rochester, N. Y.
DUSTCOTE—Electrode. Harnischfeger Corp., Milwaukee, Wis.
DUSTENDER—Dust collectors. Dustender Co., Ann Arbor, Mich.
DUSTFOE—Respirators, hoods and masks. Mine Safety Appliances Co., Pittsburgh, Pa.
DUSTKOP—Dust collectors, blowers and exhausters. Aget Mfg. Co., Adrian, Mich.
DUSTUBE—Dust collector. Wheelabrator Corp., Mishawaka, Ind.
DUTCH BOY—Solder and tinning compound, fittings, babbitt metals and lead wool. National Lead Co., New York, N. Y.
DYER—Spot welders. Topeka Foundry & Iron Works Co., Inc., Topeka, Kan.
DY-CHEK—Dye penetrant inspection. Turco Products, Inc., Los Angeles, Calif.
DYE-OX—Welding gases. Dye Oxygen Co., Inc., Phoenix, Ariz.
DYNA-FLASH—Portable electric drills, grinders sanders. Milwaukee Electric Tool Corp., Milwaukee, Wis.
DYNA-SWITCH—Crane overload switch. W. C. Dillon & Co., Chicago, Ill.
DYNAFLEX—Hose. Mulconroy Co., Philadelphia, Pa.
DYNAMASTER—Pyrometers and strain gauges. Bristol Co., Waterbury, Conn.
DYNAMITE—Hose. Mulconroy Co., Philadelphia, Pa.
DYNAPOWER—Welding cable. Carol Cable Co., Pawtucket, R. I.

E

EA—Welding cable reel. United Specialty Corp., El Dorado, Ark.
EB—Weld insert. Arcos Corp., Philadelphia, Pa.
EC&M—Automatic welding timers. Electric Controller and Mfg. Co., Cleveland, Ohio.
EC&M LINE ARC—Magnetic contractors. Electric Controller and Mfg. Co., Cleveland, Ohio
EC&M NEOTROL—Weld timers for use on air or hydraulically-operated welding machines. Electric Controller & Mfg. Co., Cleveland, Ohio
E. J. WELDER—Horsehide welding gloves. E. J. Streichert, Chicago, Ill.
EL—Electronic tubes. Electrons, Inc., Newark, N. J.
ELC—Low-carbon stainless steels. Armco Steel Corp., Middletown, O.
E-M—High frequency generators. Electric Machinery Mfg. Co., Minneapolis, Minn.
E-Z—Forge welding compound. Anti-Borax Compound Co., Inc., Fort Wayne, Ind.
E-Z CUT—Free machining steel plate. Joseph T. Ryerson & Sons, Inc., Chicago, Ill.
E-Z ACT—Clamp. McFerron-Myers Products Co., Cleveland, Ohio.
EASTERN STAYPUT—Hose couplings and fittings. J. N. Fauver Co., Inc., Detroit, Mich.
EASTON—Woven cotton belting. Victor Balata & Textile Belting Co., New York, N. Y.
EASY—Finishing sanders, portable, electric and pneumatic. Detroit Surfacing Machine Co., Detroit, Mich.
EASYARC—Iron-powder electrode. Air Reduction Sales Co., New York, N. Y.
EASYFLEX—Welding cable. Progressive Welder Sales Co., Pontiac, Mich.
EASY-FLO—Silver brazing alloy. Handy & Harman, New York, N. Y.
EASY MOUNT—Grinding wheels. Sterling Grinding Wheel Div., The Cleveland Quarries Co., Tiffin, Ohio
ECGCO—Coated cover glass for welders' helmets and coated electric light bulbs. Electro Cover Glass Co., Inc., Sharpsburg, Br., Pittsburgh, Pa.
ECONO-SPEED—Blast oven furnace. Eclipse Fuel Eng. Co., Rockford, Ill.
ECONOMIZER—Valve device which shuts off oxygen and acetylene when torch is hung on hooked lever. National Cylinder Gas Div., Chicago, Ill.
ECONOMY—Welding and cutting outfits. Burdett Oxygen Co., Cleveland, Ohio
ECONOMY—Grinders and buffers. The Hisey Wolfe Machine Co., Cincinnati, Ohio
ECONOMY—Wirewheel brush. The Osborn Mfg. Co., Cleveland, Ohio
ECONOMY "C"—Manual hardfacing rods and electrodes. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
EDUCT-O-MATIC—Abrasive cleaning tool. Clementina, Ltd., San Francisco, Calif.
No. 8 NON-CORROSIVE—Flux. Farrelloy Co., Philadelphia, Pa.
18-8 STAINLESS—Arc welding electrode. Metal & Thermit Corp., Rahway, N. J.
EISLER—Spot welders and a-c arc welders. Eisler Engineering Co., Inc., Newark, N. J.
EITHEREND—Cable connectors. Albert & J. M. Anderson Mfg. Co., Boston, Mass.
EJECTO—Spot welding tip remover. Miller Electric Mfg. Co., Inc. Appleton, Wis.
EJECTOR TYPE—Electrode holders. S-M-S Corp., Detroit, Mich.
ELCOMETER—Weld tester. Ferro Corp., Cleveland, Ohio
ELECTRA—Steel loading chain. The Cleveland Chain & Mfg. Co., Cleveland, Ohio
ELECTRIC—Hose. J. N. Fauver Co., Detroit, Mich.
ELECTRIC-AIR—Wire straightening and cutting machines. The Lewis Machine Co., Cleveland, Ohio.
ELECTR-O-LINE—Electric proportional control relay. Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.
ELECTR-O-PULSE—Electric proportional control relay, (pulse type). Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.
ELECTRO—Grinding wheels. Electro Refractories and Abrasives Corp., Buffalo, N. Y.
ELECTRO-FLUX-STIK—Soldering flux for aluminum and electric apparatus. Lake Chemical Co., Chicago, Ill.
ELECTROAIR—Pneumatic valves. The Bellows Co., Akron, Ohio
ELECTROLON—Grinding wheels. Simmonds Abrasive Co., Philadelphia, Pa.
ELECTROLOY—Copper, dies, electrodes and electrode holders, jigs and fixtures, welding wheels. Electroloy Co., Inc., Bridgeport, Conn.
ELECTRONIK—Pyrometers. Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.
ELECTROPAK—Electrode package. Arcos Corp., Philadelphia, Pa.
ELECTRO-STAYNEW—Mist collector. Dollinger Corp., Rochester 3, N. Y.
ELECTROTHERMAL—Heating tape. Arthur S. La Pine & Co., Chicago, Ill.
ELECTROWELD—Electric welding tube mill. American Electric Fusion Corporation, Chicago, Ill.
ELECTRONIC TORNADO—Carbon arc electric welder. Lincoln Electric Co., Cleveland, Ohio
ELECWELD—Electrodes. Steel Sales Corp., Chicago, Ill.
ELEPHANT BRAND—Phosphor bronze casting, bar and sheets, welding rods, wire rope and wire. Phosphor Bronze Corp., Seymour, Conn.
ELGIN—A-c arc welders. Borm Mfg. Co., Elgin, Ill.
ELIED—Acid core, rosin core, and wire solders. Farreloy Co., Philadelphia, Pa.
ELKALOY—A copper alloy for resistance welding applications. P. R. Mallory & Co., Inc., Indianapolis, Ind.
ELKONITE—High conductivity refractory materials used in resistance welding applications. P. R. Mallory & Co., Inc., Indianapolis, Ind., and SMS Corp., Detroit, Mich.
ELLIOT—Flexible shaft grinders. Elliott Manufacturing Co., Binghamton, N. Y.
ELLPRO—Electrode for arc cutting under water. Ellwood Products Co., Ellwood City, Pa.
ELLSBERG—Underwater cutting torch. Craftsweld Equipment Corp., Long Island City, N. Y.
ELMET—Pure or thoriated tungsten welding electrodes. North American Philips Co., Inc., Elmet Div., Lewiston, Maine
EMALFON—Insulated welding gloves. Singer Glove Mfg. Co., Chicago, Ill.
EMCO—Hardfacing metals. Eld Metal Co. Ltd., Los Angeles, Calif.
EMERALD BRAND—Welding plates and lenses. American Industrial Safety Equipment Co., Inc., Cleveland, Ohio
EMERSON—Arc welders. The Emerson Electric Mfg. Co., St. Louis, Mo.
EMPIRE—Cable connectors and lugs; electrode holders and vulcanizing kits. Cam-Lok Div., Empire Prod. Inc., Cincinnati, Ohio
ENDURO—Stainless steels. Republic Steel Corp., Cleveland, Ohio
ENDURON—Cover plates, lenses. American Industrial Safety Equip Co., Cleveland, Ohio
ENGWALD—Exhaust systems. Engwald Corp., Long Island, N. Y.
EQUALOAD—Motor, generator and slip ring brushes. Keystone Carbon Co., Inc., St. Marys, Pa.
EQUIPTO—Work benches, steel shelving, lockers & similar equipment. Equipto, Aurora, Ill.
ESICO—Soldering irons and tips. Electric Soldering Iron Co., Inc., Deep River, Conn.
ESSANAY—Fire extinguisher. Pyrene Manufacturing Co., Newark, N. J.
ESSANAY SODA—ACID RECHARGE—Fire extinguisher recharger. Pyrene Manufacturing Co., Newark, N. J.
ESSEE—Weldors' clothing and leather. S. C. Leather Co., Pittsburgh, Pa.
ESTOX—Metal cleaners. Standard Supply Co., New Haven, Conn.
EUREKA—Electrode holders. The Fibre-Metal Products Co., Chester, Pa.
EUREKA—Welding helmet. Welding Engineering Co., Milwaukee, Wis.
EUREKA—Welding rods; electrodes and fluxes. Welding Equipment and Supply Co., Detroit, Mich.
EUREKA—Soldering fluxes. E. I. du Pont de Nemours Wilmington, Del.
EUTEC-ALUM-WELD—Aluminum welding rod. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTECHROM—Hardfacing alloys. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTEC-COPWELD—Paste type brazing alloy. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTECROD—Brazing alloys. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTEC-SILVER-WELD—Welding and brazing kit. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTEC-SILWELD—Paste type brazing alloy. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTEC-STAINROD—Stainless Steel welding rod. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTEC-STAINTRODE—Stainless steel welding electrode. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTEC-TINWELD — Tinning compound. Eutectic Welding Allows Corp., Flushing, N. Y.
EUTEC-WALLPACK—Welding and brazing kits and arc electrode kits. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTECTO-MASK—Spatter preventive. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTECTOR—Fluxes. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTECTROFILM—Metallic coating applied to oxyacetylene rods to improve bonding and flowing properties. Eutectic Welding Alloys Corp., Flushing, N. Y.
EUTECTRODE—Tool and die electrodes. Eutectic Welding Alloys Corp., Flushing, N. Y.
EVEN-FLOW—Manifold control unit. National Cylinder Gas Div., Chicago, Ill.
EVEN TRIM—Spiral wound brushes. Pittsburgh Plate Glass Co., Baltimore, Md.
EVERDUR—Copper, silicon alloy welding rod. American Brass Co., Waterbury, Conn.
EVER-KLEAR—Cover lens. F. R. Faulk Equipment Sales, Pittsburgh, Pa.
EVERITE—Pickling medium for iron and steel. Diversey Corp., Metal Industries Dept., Chicago, Ill.
EVERLITE—Torch lighters and flints. Flint Products Co., Brooklyn, N. Y.
EVER-STICK—Alloy for repairing scored cylinders. Federated Metals Division, American Smelting and Refining Co., New York, N. Y.
EXCELOLITE—Welding lens and plates. Sellstrom Mfg. Co., Palatine, Ill.

EXCITRON—Rectifier. Allis-Chalmers Mfg. Co., Milwaukee, Wis.
EXHAUST-O-VENT — Exhaust systems and crush-proof neoprene hose. Engwald Corp., Long Island, N. Y.
EXIDE—Batteries. The Electric Storage Battery Co., Philadelphia, Pa.
EXPENDABLE—Salt tablet dispensers. United States Safety Service Co., Kansas City, Mo.
EXPERT—Welding and cutting equipment. Modern Engineering Co., St. Louis, Mo.
EXPERT—Specialized welding machines. Expert Welding Machine Co., Detroit, Mich.
EXTERNO TANK HEATER—Furnace. Eclipse Fuel Eng. Co., Rockford, Ill.
EXTRA-FLEX—Welding cable. Burdett Oxygen Co., Cleveland, Ohio
EYEGARD—Head and eye protective equipment. American Industrial Safety Equipment Co., Inc., Cleveland, Ohio
EYE SAVER—Safety goggles. Watchemoket Optical Co., Inc., Providence, R. I.
EZY-FLEX—Welding cable. National Welders Supply Co., Charlotte, N. C.

F

F8—Cyclone-type (bag-equipped) dust collector. Torit Mfg. Co., St. Paul, Minn.
F-M—Cooling unit for circulating liquid coolant through electrode tips of spot welder. Fairbanks-Morse and Co., Chicago, Ill.
FM 184—Cleaning compound for deburring, descaling, derusting. Oakite Products, Inc., New York, N. Y.
F-2—Flash, butt resistance welders. Thomson Electric Welder Co., Lynn, Mass.
FW—Ac-dc electrode. Harnischfeger Corp., Milwaukee, Wis.
FABRILOY—Build-up rod. Industrial Overlay Metals, Eaton, Ohio
FACEWELD—Hardfacing electrode. Lincoln Electric Co., Cleveland, Ohio
FACE-FITT—Welding and chipping goggles. Kimball Safety Prod. Co., Cleveland, Ohio
FAIRWAY—Salt tablets and plastic dispensers. Standard Safety Equipment Co., Chicago, Ill.
FALCON—Electric furnaces, portable elec. preheating and stress relieving; heating and control panels. Falcon Equipment Co., New Brighton, Pa.
FAN-PAC—Exhaust fans. De Bothezat Fans Div., American Mach. & Metals, Inc., East Moline, Ill.
FANSTEEL—Tungsten electrodes and tempered soldering tips. Fansteel Metallurgical Corp., North Chicago, Ill.
FANWELD—Hardfacing metal. Fansteel Metallurgical Corp., North Chicago, Ill.
FARBER—Fire brick. North American Refractories Co., Cleveland, Ohio
FARCO—Brick, soldering salts, solder. Farreloy Co., Philadelphia, Pa.
FARLENE-OILMETER—Flux. Farreloy Co., Philadelphia, Pa.
FARMFACE—Austenitic high chromium iron hard facing rod. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
FARRELLOY—Solder. Farreloy Co., Philadelphia, Pa.
FARSOL—Soldering paste. Farreloy Co., Philadelphia, Pa.
FAST-ACTION—Welding clamps. Hallwell Tool Co., Los Angeles, Calif.
FASTFOME—Fire extinguisher. Pyrene Manufacturing Co., Newark, N. J.
FASTFOME FOAM RECHARGER—Fire extinguisher recharger. Pyrene Manufacturing Co., Newark, N. J.
FAST GRIP—Welding jigs and fixtures. Robert J. Kelly Mfg. Co., Detroit, Mich.
FASTIN—Paste solder. Farreloy Co., Philadelphia, Pa.
FASTWELL—High speed electrode. Steel Sales Corp., Chicago, Ill.
FAULTLESS—Oxyacetylene hose. The Home Rubber Co., Trenton, N. J.
FAVORITE—Reversible ratchet wrench. Greene, Tweed & Co., North Wales, Pa.
FEATHER SPEC—Goggles. Willson Products, Inc., Reading, Pa.
FEATHERLIGHT—Arc welding electrode holders and face shields. Jackson Products. Air Reduction Sales Co., Warren, Mich.
FEATHERWEIGHT—Face shields. Dockson Corp., Detroit, Mich.
FEDERAL—Electric spot welding machinery, projection welders, seam welders, portable welders, flash welders, heaters and electric transformers. Federal Machine and Welder Co., Warren, Ohio
FEDERAL—Bar and wire solder. Swiss Laboratory, Cleveland, Ohio
FEDERAL NOARK—Controls, magnetic contactors, general purpose relays and switches. Federal Electric Products Co., Newark, N. J.
FEDREX—Lightweight, portable, X-ray machines. Machinery & Welder Corp., Chicago, Ill.
FEND—Protective skin creams. Mine Safety Appliance Co., Pittsburgh, Pa.
FENWAY NIBBLERS—Portable, electric and pneumatic cutting tools. Fenway Machine Co., Inc., Philadelphia, Pa.
FERREX—Metals cleaner. Turco Products, Inc., Los Angeles, Calif.
FERRO—Cast Iron welding flux. Linde Co., New York, N. Y.
FERRO BOND—Stainless clad steel. Worth Steel Co., Claymont, Del.
FERROFIT—Nozzles for burners. Eclipse Fuel Engineering Co., Rockford, Ill.
FERROFLAME—Powder for powder flame cutting. National Cylinder Gas Div., Chicago, Ill.
FERROFLUX—Magnetic particle inspection equipment. Ferro Machine & Tool Corp., Indianapolis, Ind.
FERROJET—Powder cutting equipment. National Cylinder Gas Div., Chicago, Ill.
FERRO-CASTIN—Cast-iron fluxes and hardfacing welding rods. Uniweld Research Corp. of America, Cleveland, Ohio
FERROWELD—Welding electrode. Lincoln Electric Co., Cleveland, Ohio
FERULOK—Tube fittings. The Parker Appliance Co., Cleveland, Ohio
FEATHERWATE-STREAMLINER — Weldors' helmet. Sellstrom Mfg. Co., Palatine, Ill.
FIBRE-METAL—Welding helmets and face shields. The Fibre Metal Products Co., Chester, Pa.
FIBREX—Grinding wheels. Simonds Abrasive Co., Philadelphia, Pa.
FIELD KING—D-c engine dirven welder. A. O. Smith Corp., Welding Products Division, Milwaukee, Wis.
50/50 SOLDER-SPRED—Solder flux. Swiss Laboratory, Cleveland, Ohio
"51" NICKEL—For welding of pure nickel. International Nickel Co., Inc., New York, N. Y.
"52" INCONEL—Electrode for welding Inconel. International Nickel Co., Inc., New York, N. Y.
FILLEX—Arc welding electrode. Metal & Thermit Corp., Rahway, N. J.
FILTAIRVENT—Filtered air ventilator and welding fume exhauster. Dustender Co., Ann Arbor, Mich.
FILTERWELD—Filter glass, plates and lenses. American Optical Co., Southbridge, Mass.
FIRECRETE—Refractories. Johns-Manville, New York, N. Y.
FIRE-FITER—Asbestos fire fiter suits. Industrial Gloves Co., Danville, Ill.
FIRE-GUN—Torches. Hauck Mfg. Co., Brooklyn, N. Y.
FIRE GUN—Propane torch. Fire Gun Sales Corp., Denver 4, Colo.
FIREKING—Fire rescue and entry suit. Wheeler Protective Apparel, Inc., Chicago, Ill.
FIREOIL—Panel. The Philip Carey Mfg. Co., Lockland Cincinnati, Ohio
FIREYE—Flame-failure safeguards, for oil and gas burners. Combustion Control Corp., Cambridge, Mass.
5-IN-1—CUTTING ELECTRODE—For cutting without oxygen. All-State Welding Alloys Co., Inc., White Plains, N. Y.
FIXER-NEUTRALIZER—X-ray film processor. General Electric Corp., Milwaukee, Wis.
FIXTURE FRAMERS—Clamps. Detroit Stamping Co., Detroit, Mich.
FLAMECRAFT—Oxyacetylene welding and cutting outfit. Air Reduction Sales Co., New York, N. Y.
FLAMEMASTER—Shape cutting machine. Indiana Oxyaen Co., Indianapolis, Ind.
FLAME-O-GRAPH—Flame cutter. Victor Equipment Co., Welding Equipment Div., San Francisco, Calif.
FLAME-PLATING—Process of tungsten carbide coating. Linde Co., New York, N. Y.
FLAME-PRUF—Water soluble powder for treating clothes or other fabrics which prevents them from igniting when exposed to sparks. Wolfe-Kote Co., Inc., Sheboygan, Wis.
FLAME-RITE—Soldering outfits. National Welders Supply Co., Charlotte, N. C.
FLAME SAW—Cutting machine for structural steel. K-G Equipment Co., Inc., Allentown, Pa.
FLASH—Circle burner. Scientific Research Co., Portland, Ore.
FLASH-EX—Flash preventive. Wayne Chemical Products Co., Detroit, Mich.
FLATFEET—Fixture feet. Jergens Tool Specialty Co., Cleveland, Ohio
FLATWEAVE—Wire rope sling. John A. Roeblings' Sons Co. Trenton, N. J.
FLEET-ARC—A-c welders. Lincoln Electric Co., Cleveland, Ohio
FLEETWELD—Shielded arc electrodes. Lincoln Electric Co., Cleveland, Ohio
FLEETWELDER—A-c welders. Lincoln Electric Co., Cleveland, Ohio
FLEXALOY—Hardfacing electrodes. Industrial Overlay Metals, Eaton, Ohio
FLEXARC—Arc welding apparatus, electrodes and accessories. Westinghouse Electric Corp., Pittsburgh, Pa.
FLEXAUST—Ventilating hose. American Ventilating Hose Co., New York, N. Y.
FLEXIBLE ABRASIVE — Flexible abrasive stones. Ideal Industries, Inc., Sycamore, Ill.
FLEX-A-DRENE—Paint spray mask and respirator. Flexo Products, Inc., Westlake, Ohio.
FLEX-A-FOAM—Dust mask and respirator. Flexo Products, Inc., Westlake, Ohio
FLEXON—Flexible hose. Flexonics Corp., Maywood, Ill.
FLEX-COVER—Flat plastic plates and lenses. Sellstrom Mfg. Co., Palatine, Ill.
FLEX-SET—Wire rope. Broderick & Bascom Rope Co., St. Louis, Mo.
FLEXSPEED—Buffing and polishing lathe. Divine Brothers Co., Utica, N. Y.
FLEX-TESTER—Sheet metal tester. Steel City Testing Machines, Inc., Detroit, Mich.
FLINT—Gas spark lighters and renewal flints. Flint Products Co., Brooklyn, N. Y.
FLINTWELD—Hardfacing rod. Steel Sales Corp., Chicago, Ill.
FLINTYPE VH—Flat impact hardfacing electrode. Resisto-Loy Co., Inc., Grand Rapids, Mich.
FLO-KOTE — Manganese-nickel electrode. Stulz-Sickles Co., Newark, N. J.
FLO-EZ-FLUX No. 5—Gas welding magnesium fluxes. Park-Stewart, Worthington, Pa.
FLO-SCOPE—Flow rate indicator for air and gas lines. Selas Corp. of America, Dresher, Pa.
FLOOD—Helmets and other safety equipment. Flood Safety Products Co., Chicago, Ill.
FLO-SET—Speed control valve. Hanna Engrg. Works, Chicago, Ill.
FLOTECTIC—Flux. Eutectic Welding Alloys Co., Flushing, N. Y.
FLOTITE No. 2—Cast iron chrome, steel elec. weld flux. Pittsburgh Metals Purifying Co., Pittsburgh, Pa.
FLOTITE No. 3 — Brass brazing flux. Pittsburgh Metals Purifying Co., Pittsburgh, Pa.
FLOTROL—Speed control valves. Galland-Henning Mfg. Co., Milwaukee, Wis.
FLOWLINE—Welding fittings. Welding Fittings Corp., New Castle, Pa.
FLU-OX and **FLUID-OX**—Liquid oxygen, sphere delivery. Big Three Welding Equipment Co., Houston, Texas
FLUTED ELECTRODES — Resistance welding electrodes. P. R. Mallory & Co., Indianapolis, Ind.
FLUX INJECTION—Powder cutting. Air Reduction Sales Co., New York, N. Y.
FLUX-FEEDER—Flux dispenser. Air Reduction Sales Co., New York, N. Y.
FLUXINE—Fluxes. Krembs & Co., Chicago, Ill.
FLUX KIT—Soft soldering kit. Alpha Metals, Inc., Jersey City, N. J.
FLUX-N-SOLDER—Compositions of solders suspended in fluxes. Johnson Mfg. Co., Inc., Mt. Vernon, Iowa
FLUX-RITE—Welding fluxes. National Welding Supply Co., Charlotte, N. C.
FLUXRITE—Fluxed wire solder. National Lead Co., New York, N. Y.
FLUX-WELL—Flux. Chicago Hardware Foundry Co. North Chicago, Ill.
FLXO 666—Weldors' gloves. Boss Mfg. Co., The, Kewanee, Ill.
FOAMITE—Fire extinguishers and air foam. American La France Corp., Elmira, N. Y.
FOAMITE AIRFOAM—Nozzles, liquid, and fire extinguishing systems. American La France Corp., Elmira, N. Y.
FOAMITE CRUSADER—Fire extinguishers. American La France Corp., Elmira, N. Y.
FOG-BAN—Anti-fog compounds. Bausch & Lomb Optical Co., Rochester, N. Y.
FOILLE—Burn spray and first aid kit. Mine Safety Appliances Co., Pittsburgh, Pa.
FOLEY—Drill presses, band and circular saws, jigsaws, wood lathes, saw grinders, etc. Foley Mfg. Co., Minneapolis, Minn.
FOOTE—Electrode-coating materials. Foote Mineral Co., Philadelphia, Pa.
FORD—Chain hoist. Ford Chain Block Division of American Chain & Cable Co., Inc., York, Pa.
FORM-A-JIG—Non-metallic, pliable, heat resisting compound for holding small parts during joining. Eutectic Welding Alloys Corp., Flushing, N. Y.
FORMINCO—Products used for welding rod and electrode coatings and fluxes. Foote Mineral Co., Philadelphia, Pa.
FORMULA 953—Metal cleaner. Kelite Products, Inc., Los Angeles, Calif.
FORNEY—A-c and d-c arc welders. Forney Mfg. Co., Fort Collins, Colorado.
"41" NICKEL—For welding of pure nickel. International Nickel Co., Inc., New York, N. Y.
"43" MONEL—For welding heavy sections of Monel for acid pickling service. International Nickel Co., Inc., New York, N. Y.
FORTY-FIVERS—Clamps. Detroit Stamping Co., Detroit, Mich.
FRANKLIN—A-c welder. Franklin Transformer Manufacturing Co., Minneapolis, Minn.
FREE FLOW—Brazing flux. General Welding & Equipment Co., Boston, Mass.
FREE-FLO—Cast iron welding rods. Atlas Foundry Co., Cleveland, Ohio
FREEMACHINE WELD—Cast iron welding electrodes. Westinghouse Electric Corp., Pittsburgh, Pa.
FRESHAIR—Air supplied weld helmets. Fibre-Metal Products Co., The, Chester, Pa.
FRICTIONLESS—Babbitt metal. Federated Metals Div., American Smelting & Refining Co., New York, N. Y.
FRIGICAP—Helmet liners for head and ears. Jackson Products, Inc., Warren, Mich.
FRIGID-ARC—Electrode coating. Eutectic Welding Alloys Corp., Flushing, N. Y.
FRIGID WELD ROD—Welding rods. Eutectic Welding Alloys Corp., Flushing, N. Y.
FROGALLOY—Hardfacing electrode. McKay Co., Pittsburgh, Pa.
FRONTENAC—A-c arc welders. Canadian Liquid Air Co., Ltd., Montreal, Que., Canada.
FRO-PRENE—Nylon neoprene coated, resistant to fire and weather. Frommelt Industries, Dubuque, Iowa
FULLBACK—Leather welding gloves. E. J. Streichert, Chicago, Ill.
FUL-VUE—Goggles. American Optical Company, Southbridge, Mass.
FUMELESS WELDING ROD No. 240 — Fumeless bronze welding rod. Mueller Brass Co., Port Huron, Mich.
FUSE-WELL—Cast iron rods and electrodes. Chicago Hardware Foundry Co., North Chicago, Ill.

FUSION SOLDER—Solder. Fusion Engineering Co., Cleveland, Ohio
FUZEE—Metals and parts cleaner. Turco Products, Inc., Los Angeles, Calif.
FUZON—Alloy welding electrodes. Chicago Steel and Wire Co., Chicago, Ill.
FYRE-FREEZ—Fire extinguishers. Walter Kidde & Co., Inc., Belleville, N. J.

G

GB—Silver brazing fluxes and alloys. Goldsmith Bros. Smelting & Refining Co., Chicago, Ill.
G ELECTROLON—Grinding wheels. Simonds Abrasive Co., Philadelphia, Pa.
G-STRIPPER—Metal cleaner. Kelite Products, Inc., Los Angeles, Calif.
GALVINOLEUM—Rust preventive coatings. Rust-Oleum Corp., Evanston, Ill.
G-E—X-ray machines and RW controls and tubes. General Electric Co., Schenectady, N. Y.
G.M.C.—Resistance type welder. Guyan Machinery Co., Logan, W. Va.
G.M.C.—Welding torches. The Harris Calorific Co., Cleveland, Ohio
GS—Safety clothing and equipment. General Scientific Equipment Co., Philadelphia, Pa.
GALV-KOTE—Galvanizing compounds. George H. Ohmer, Dayton, Ohio
GALV-WELD—Galvanizing compound and aluminum, magnesium solder. Galv-Weld, Inc., Dayton, Ohio
GALVALLOY — Galvanizing compound. Metalloy Products Co., Los Angeles, Calif.
GALVICON—Corrosion resistant protective coating. Galvicon Corp., New York, N. Y.
GAMMA CAMERA—Isotope radiography camera. Tracerlab, Inc., Waltham, Mass.
GAMMALARM—Gamma and X-ray protection. Picker X-Ray Corp., White Plains, N. Y.
GARDRAY—Radiation badges. Picker X-Ray Corp., White Plains, N. Y.
GARDSMAN—Leather safety clothing and supplies. Racine Glove Co., Rio, Wis.
GARDWELL—Safety clothing and equipment. Safety Clothing & Equipment Co., Cleveland, Ohio
GASARC—Inert arc welders and torches. National Cylinder Gas Div., Chicago, Ill.
GAS CARBOX—Bright copper finish welding rod. Central Steel and Wire Co., Chicago, Ill.
GAS FLUX—Liquid brazing flux. Gasflux Co., Elyria, Ohio
GAS-FLUXER—Unit for dispensing liquid flux into the acetylene line of a gas welding outfit. Gasflux Co., Elyria, Ohio
GASAVER—Gas economizer. The Harris Calorific Co., Cleveland, Ohio
GASAVER—Automatic gas shut-off. Weldit, Inc., Detroit, Mich.
GASO KUT-MOR—Flame cutting machine. Gaso Equipment Co., Chicago, Ill.
GAS-O-DOME—Regulator. Victor Equipment Co., San Francisco, Calif.
GAS-O-GEN—Acetylene generator. Eutectic Welding Alloys Corp., Flushing, N. Y.
GASO V-10—Flame-cutting machine. Gaso Equipment Co., Chicago, Ill.
GAS-PAK—Gas rod package. Marquette Manufacturing Co., Inc., Minneapolis, Minn.
GASPRO—Compressed and liquid gases. Gaspro Ltd., Honolulu, Hawaii
GAS SAVER—Inert-gas welding equipment. Electron-Arc, Inc., Lynn, Mass.
GAS-TITE—Seating rings for oxy-acetylene equipment. National Cylinder Gas Div., Chicago, Ill.
GASTON—Portable gun welder. Karma Mfg. Co., Harvey, Ill.
GASWELD—Gas regulators, soldering outfits, flame cutting, soldering and gas welding tips, brazing, preheating, welding and flame cutting torches, welding and cutting apparatus and flame hardening equipment. Liquid Carbonic Div., General Dynamics Corp., Chicago, Ill.
GEAR-DRIVEN—Welding positioner. Aronson Machine Co., Arcade, N. Y.
GENCO—Welders' protective clothing of leather, asbestos, duck and canvas. C. D. Genter Co., Chattanooga, Tenn.
GENERAL—Aluminum and copper welding cable. General Cable Corp. New York, N. Y.
GENERAL PURPOSE—Plugs and receptacles. Pyle-National Co., Chicago, Ill.
GENEX—Arc welding electrode. Metal & Thermit Co., Rahway, N. J.
GES—Electric hand shears. Jefferson Engineering & Mfg. Co., Detroit, Mich.
GES-9—Electric hand shears. 14 gauge. Jefferson Eng. & Mfg. Co., Detroit, Mich.
GES-12—Electric hand shears. 12 gauge. Jefferson Eng. and Mfg. Co., Detroit, Mich.
GEWECO—Welding and cutting apparatus and automatic shape cutting machines. General Welding and Equipment Co., Boston, Mass.
GLAREGARD—Lenses. Dockson Corp., Detroit, Mich.
GLAZE-ITE—Cover glass. Willson Products, Inc., Reading, Pa.
GLENROCK—Heat treated lenses. Glendale Optical Co., Inc., Valley Stream, N. Y.
GLENSITE—Welders and chippers goggles. Glendale Optical Co., Inc., Valley Stream, N. Y.
GLENWELD—Filter lenses. Glendale Optical Co., Valley Stream, N. Y.
GLO-MELT—Soldering unit. Wassco Electric Products Corp., Joliet, Ill.
GOLDEN HEETMASTER—Heat and flame resistant gloves. Singer Glove Mfg. Co., Chicago, Ill.
GOLD STAR—Selenium rectifier, welder. Miller Electric Mfg. Co., Inc., Appleton, Wis.
GOODRICH, B. F.—Welding, fire, steam and sandblast hose. B. F. Goodrich Co., Akron, Ohio
GOODYEAR—Welding hose. Goodyear Tire & Rubber Co., Akron, Ohio
GORHAM HIGH SPEED WELDING METAL—Tool steel welding rod. Gorham Tool Company, Detroit, Mich.
GORITE—Boots, bellows, and sleeves for welding positioner and machinery. A & A Mfg. Co., Milwaukee, Wis.
GOSS—Adaptors, electrode holders, couplings and fittings, manifolds and oxygen tips, welding gas, etc. Goss Gas, Inc., Glenshaw, Pa.
GRADIATION—Heating equipment. Selas Corp. of America, Dresher, Pa.
GRAHAM—Stud welding equipment. Graham Mfg. Corp., Needham Heights, Mass.
GRAMPUS—Weldors' vise. Belmont Abrasives, Boston, Mass.
GRAND CHAMP and GRAND QUIKCET—Clamps. Grand Specialties Co., Chicago, Ill.
GRANDELUXE—Hand and electric lift truck. Grand Specialties Co., Chicago, Ill.
GRAYDAC—Mild-steel electrodes. Champion Rivet Company, Cleveland, Ohio
GRAY DEVIL—Mild steel electrodes. Champion Rivet Co., Cleveland, Ohio
GREEN LABEL—Filter plates. Thermacote Co., Pasadena, Calif.
GREENLEE—Benders, conduit, pipe and tubing. Greenlee Tool Co., Rockford, Ill.
GREEN-STRIPE—Sandpaper. Clover Mfg. Co., Norwalk, Conn.
GREENWEAR—Acid resistant clothing. Wheeler Protective Apparel, Inc., Chicago, Ill.
GREYHOUND—Portable spot welder. Duro-Dyne Corp., New Hyde Park, L. I., N. Y.
GRIEVE-HENDRY—Electrode storage ovens. Grieve-Hendry Co., Inc., Chicago, Ill.
GRINDAWAY—Grinding wheels. Colonial Abrasive Products Co., Conshohocken, Pa.
GRINDHOG—Portable grinders. The Hisey-Wolf Machine Co. Cincinnati, Ohio
GRIND-O-FLEX—Flexible abrasive finishing wheel. Merit Products, Inc., Los Angeles, Calif.
GRINNELL—Welding fittings and prefabricated piping. Grinnell Co., Inc., Providence, R. I.
GRINNELL-SAUNDERS—Air line valves. Grinnell Co., Inc. Providence, R. I.
GRIP-MASTER—Drill press vise. National Machine Tool Co. Racine, Wis.
GRIPSO—Vise pliers. H. R. Basford Co., San Francisco, Calif.
GRIP-TITE—Brush holder for brush attached to chipping hammer. Atlas Welding Accessories, Inc., Ferndale, Mich.
GRITCLOTH—Open-mesh coated abrasives. Bay State Abrasive Products Co., Westboro, Mass.
GROUND HOG—Magnetic ground. Magne-Cast Tool Co. Inc., Chicago, Ill.
GROUZABAR—Bar for rebuilding grousers on crawler equipment. Pyramid Steel Co., Cleveland, Ohio
GUARDENE—Fire extinguisher. Pyrene Manufacturing Co. Newark, N. J.
GUARDENE SODA-ACID RECHARGER—Fire extinguisher recharger. Pyrene Manufacturing Co., Newark, N. J.
GUARD-LINE—Gloves, leather and asbestos weldor's clothing. Twentieth Century Glove Corp. of Texas, Atlanta, Texas
GUARDSMAN—Attachment which can be placed upon a single stage oxygen regulator to make it operate in two stages of reduction. K-G Equipment Co., Inc., Allentown, Pa.
GUILLOTINE—Portable hydraulic hand, air and electrically operated wire rope, rod, chain and electric cable cutters. Manco Mfg. Co., Bradley, Ill.
GULF—Oxygen, acetylene, nitrogen, and compressed air. Gulf Oxygen Co., Inc., Lake Charles, La.
GUN-GUIDE—Positioner and manipulator for welding gun. The Guide-Weld Co., Fresno, Calif.
GUYAN—Bondwelder. Guyan Machinery Co., Logan, W. Va.
GWECO—Resistance welding transformers. Goodrich Welding Equipment Corp., Hudsonville, Mich.
GYRALOY—Wire screen cloth. Hewitt-Robins, Inc., Stamford, Conn.

H

HF—Induction heaters. Scientific Electric, Garfield, N. J.
HF-40—Manual hardfacing rods and electrodes. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
HF-60—Manual hardfacing rods and electrodes. American Manganese Steel Division, American Brake Shoe Co., Chicago Heights, Ill.
H.F.M. 600—Hardfacing manganese electrodes. Industrial Overlay Metals, Inc., Eaton, Ohio
H & M—Pipe cutting and beveling machine. H & M Pipe Beveling Machine Co., Tulsa, Okla.
HPM—Hydraulic presses including presses for electrode extrusion coating. Hydraulic Press Mfg. Co., Mt. Gilead, Ohio.
HABIRPENE—Neoprene insulation and sheaths used on welding cable. Phelps Dodge Copper Products Corp., New York, N. Y.
HABIRSHAW—Insulated wires and cables. Phelps Dodge Copper Products Corp., New York, N. Y.
HACKNEY—Compressed gas cylinders and air receivers. Pressed Steel Tank Co., Milwaukee, Wis.
HALCO—First aid kits and sweat bands. A. E. Halpering Co., Inc., Boston, Mass.
HALLOWELL—Steel work benches, stools and chairs. The Standard Pressed Steel Co., Jenkintown, Pa.
HALO—Face shields. United States Safety Service Co., Kansas City, Mo.
HAMIKLEER—Synthetic coolant and rust preventive. Harry Miller Corp., Philadelphia, Pa.
HAMILTON—Bench type drilling machines and welding tables. The Hamilton Tool Co., Hamilton, Ohio.
HAN-D-AIR—Positioning air cylinders. The Bellows Co., Akron, Ohio
HANCO—Vises. Wilton Tool Mfg. Co., Schiller Park, Ill.
HANCOCK—Globe, angle and gate valves. Manning, Maxwell & Moore, Inc., Muskegon, Mich.
HANDEE—Electric grinders. Chicago Wheel & Mfg. Co., Chicago, Ill.
HANDI-ARC—Pistol-grip electrode holder. Frank Niem Metal Products, Inc., Gurnee, Ill.
HAND-I-HACK—Power hack saw. Wallace Supplies Mfg. Co., Chicago, Ill.
HANDNIB—Shears, nibblers, rod cutters and punches. National Machine Tool Co., Racine, Wis.
HAND-O-MATIC — Welding electrode. Eutectic Welding Alloys Corp., Flushing, N. Y.
HANDY—Silver solder. Handy & Harman, New York, N. Y.
HANDY—Drill press vise. National Machine Tool Co., Racine, Wis.
HANDY ALUMIBRAZE—Aluminum brazing alloy. Handy & Harman, New York, N. Y.
HANDY BENDY—½ in. and ¾ in. rigid and thin-wall conduit bender. Tal Bender, Inc., Milwaukee, Wis.
HANDY FLUX—Flux for silver alloy brazing. Handy & Harman, New York, N. Y.
HANDY-GIANT—Lightweight portable welder. Cauhorn Mfg. Co., Detroit 4, Mich.
HANDY HI-TEMP—High temperature brazing alloy. Handy & Harman, New York, N. Y.
HANDY HI-TEMP—High temperature brazing flux. Handy & Harman, New York, N. Y.
HANNA—Air and hydraulic cylinders and valves. Hanna Engrg. Works, Chicago, Ill.
HANOVER—Weldors gloves and mittens. Hanover Glove Co., Hanover, Pa.
HARCAST—A-c, d-c mild steel electrode for welding cast iron. Harnischfeger Corp., Milwaukee, Wis.
HARDCHROME—A-c, d-c chromium electrodes. Harnischfeger Corp., Milwaukee, Wis.
HARCOTE — Electrodes for hardfacing. Harnischfeger Corp., Milwaukee, Wis.
HARD DEVIL—Hardfacing electrode. The Champion Rivet Co., Cleveland, Ohio
HARD-HEDS—Fluxed carbides. Superweld Corp., North Hollywood, Calif.
HARDALLOY—Hardfacing electrode. McKay Co., Pittsburgh, Pa.
HARD-CRAFT—Electrodes. Allied Weld-Craft, Inc., Indianapolis, Ind.
HARDENTOUCH—Hardfacing electrodes Westinghouse Electric Corp. Pittsburgh, Pa.
HARDEX—Hard surfacing electrodes and wires. Metal & Thermit Corp., Rahway, N. J.
HARD-N-TUFF—Steel hardening compound. Hard-N-Tuff Corp., Huntington, L. I., N. Y.
HARDFACER No. 11 and No. 112—Coated type electrodes for hardfacing. Hobart Bros. Co., Troy, Ohio
HARDWELD—Hardfacing electrode. Lincoln Electric Co., Cleveland, Ohio
HARGRAVE—"C" clamps, cold chisels and other small hand tools. The Cincinnati Tool Co., Cincinnati, Ohio
HARMONANG A—Coated manganese molybdenum electrode. Harnischfeger Corp., Milwaukee, Wiss.
HARPER—Cylinder trucks. Harper Steel Co., Harper, Kan.
HARRIS—Welding and cutting equipment, torches, regulators and accessories. Harris Calorific Co., Cleveland, Ohio
HARRISBURG—Oxygen cylinders, flanges. Harrisburg Steel Corp., Harrisburg, Pa.
HARSTAIN—A-c, d-c electrodes for welding stainless steels. Harnischfeger Corp., Milwaukee, Wis.
HARTUNG — Coated tungsten molybdenum electrode. Harnischfeger Corp., Milwaukee, Wis.
HAR-WORTH—Electrode holders, ground clamps and cable connectors. Welding Alloys Mfg. Co., Newark, N. J.
HASCROME—Iron-base hardfacing rods. Haynes Stellite Co., Kokomo, Ind.
HASTELLOY—Nickel-base hardfacing rods. Haynes Stellite Co., Kokomo, Ind.
HAT 'N' GOGS—Safety hats and goggles. Chicago Eye Shield Co., Chicago, Ill.
HAT 'N' SHIELD—Safety hats and helmets. Chicago Eye Shield Co., Chicago, Ill.
HAUCK—Oil and gas burning torches, furnaces and firepots. Hauck Manufacturing Co., Brooklyn, N. Y.
HAV-ALIFT—Salt tablets. A. E. Halpering Co., Inc., Boston, Mass.
HAYNES—Alloys and precision castings. Haynes Stellite Co. Kokomo, Ind.
HAYNES STELLITE—Cobalt-base hard facing rods. Haynes Stellite Co., Kokomo, Ind.
HAYSTELLITE—Cast tungsten carbide hard facing material. Haynes Stellite Co., Kokomo, Ind.
HAZACORD—Welding cable. Hazard Insulated Wire Works, (Division of the Okonite Co.), Wilkes-Barre, Pa.
HEAD-REST—Goggles. Jackson Products, Air Reduction Sales Co., Warren, Mich.

HEALTHGUARD—Chicago Eye Shield Co., Chicago, Ill.
HEAT-FOE—Asbestos gloves. Miller Products Co., Inc., New York 7, N. Y.
HEAVY-DUTY—Ground clamps. Lenco, Inc., Jackson, Mo.
HEAVY DUTY—Manipulator and automatic welding head. The Lewis Welding & Engineering Corp., Bedford, Ohio
HELIARC—Tig (tungsten inert-gas) welding apparatus. The Linde Co., New York, N. Y.
HELI-MASTER—The Osborn Mfg. Co., Cleveland, Ohio
HELISTAIN—Welding flux. Sierra Welding Flux Co., Temple City, Calif.
HELIWELD—Tig (Tungsten inert-gas) welding equipment. Air Reduction Sales Co., New York, N. Y.
HELLER NUCUT—Files, metal-cutting band saw and hack saw blades. Heller Tool Co., Newcomerstown, Ohio
HELLER JOB-TEMPERED—Band saw and hack saw blades. Heller Tool Co., Newcomerstown, Ohio
HELLITE—Refractory cement. Johns-Manville, New York, N. Y.
HELMCO-LACY—Flux pot. Helmco, Inc., Chicago, Ill.
HEMATOX—Cast Iron flux. Canadian Liquid Air Co., Ltd., Montreal, Que., Canada
HERCULES—Solder flux and paste, iron cement, boiler solder. Hercules Chemical Co., Inc., New York, N. Y.
HERCULES—Copper coated low carbon steel welding rod. Canadian Liquid Air Co., Ltd., Montreal, Que., Canada
HERCULITE—Welding helmets. Dockson Corp., Detroit, Mich.
HERCULOY—Silicon bronze welding rods. Revere Copper and Brass, Inc., New York, N. Y.
HEVI-DUTY—Furnaces and transformers. Hevi-Duty Electric Co., Milwaukee, Wis.
HEVI-LIFT—Electric hoist. Harnischfeger Corp., Milwaukee, Wis.
HEWCRON—Fire hose. Hewitt-Robins, Inc., Stamford, Conn.
HEWITT—Steam hose. Hewitt-Robins, Inc., Stamford, Conn.
HEWROLITE—Fire hose. Hewitt-Robins, Inc. Stamford, Conn.
HEXACON—Electric soldering and branding irons. Hexacon Electric Co., Roselle Park, N. J.
HICKORY—File handles. O. P. Link Handle Co. Salem, Ind.
HICYCLE—Grinders, sanders and polishers. Chicago Pneumatic Tool Co., New York, N. Y.
HI-AMP—Ground clamps electrode holder. Lenco, Inc., Jackson, Mo.
HI-BAK—Welders gloves. Boss Mfg. Co., Kewanee, Ill.
HI-C—Hardfacing powder and paste. Western Carbide Corp., North Hollywood, Calif.
HI-CYCLE—High frequency unit. Will-Weld Manufacturing Co., Inc., Omaha, Neb.
HI-GRADE—Soldering flux. Hi-grade Alloy Corp., Chicago, Ill.
HI-LO—A-c welding machines. Elkstrom Electric, Detroit, Mich.
HI-POWER—Portable electric drills and grinders. Portable Electric Tools, Inc., Chicago, Ill.
HI-SEAL—Plastic sealing compound. Greene, Tweed & Co., North Wales, Pa.
HI-SPEED—Oxyacetylene welding and cutting torches. Dockson Corp., Detroit, Mich.
HI-SPEED—Grinding compounds. Clover Manufacturing Co., Norwalk, Conn.
HI-TENSILE—Coated electrodes. Page Steel & Wire Division of American Chain and Cable Co., Inc., Monessen, Pa.
HI-TEST—Non-fuming flux. Air Reduction Sales Company, New York, N. Y.
HI-WAVE—Spot welders of condenser discharge type. Taylor-Winfield Corp., Warren, Ohio
HICARWELD—High carbon steel welding rod. Steel Sales Corp., Chicago, Ill.
HICYCLE—Grinders. Chicago Pneumatic Tool Co., New York, N. Y.
HIGH SPEED—Tinning flux. E. I. du Pont de Nemours & Co., Grasselli Chem. Div., Wilmington, Del.
HIGH SPEED—Arc-oxygen underwater and surface cutting electrodes. Craftsweld Equipment Corp., Long Island City, N. Y.
HIGH VISIBILITY—Protective lens. Lincoln Electric Co., Cleveland, Ohio
HISEY—Grinders and buffers. Hisey-Wolf Machine Co., Cincinnati, Ohio
HOBART—A-c and d-c arc welding machines, electrodes and equipment, d-c welding equipment, electric, gas engine driven and diesel engine driven; mobile d-c welder; battery charger; clean-weld compound; metal filler, etc. Hobart Bros. Co., Troy, Ohio
HOBBY—Steel tape rule. Carlson Rules & Measures, Monrovia, Calif.
HOBRONZ—Electrode for carbon arc. Hobart Brothers Co., Troy, Ohio
HOCO—Oxygen, acetylene, nitrogen, and medical gas mixtures. Houston Oxygen Co., Inc., Houston, Tex.
HOKE—Torches, regulators, valves, laboratory and other equipment. Hoke, Inc., Cresskill, N. J.
HOLE SHOOTER—Drills. Milwaukee Electric Tool Corp., Milwaukee, Wis.
HOLDEN FLUX—Silver brazing flux. Standard Supply Co., New Haven, Conn.
HOLCOMB PROTECTION—Welders' safety garments. Holcomb Safety Garments Co., Chicago, Ill.
HOLCROFT—Furnaces. Holcroft & Co., Detroit, Mich.
HOLD-ARK—Carbon electrodes. Speer Carbon Co., St. Marys, Pa.
HOL-GRIP—Electrode Holders, Tweco Products, Inc., Wichita, Kansas
HOLGUN—Portable electric drill. The Black & Decker Mfg. Co., Towson, Md.
HOLLANDS—Bench, combination pipe and machinist vises and pipe cutters. Hollands Mfg. Co., Erie, Pa.
HOLLOW KINGPIN—Positioner. The Pandjiris Weldment Co., St. Louis, Mo.
HOLLUP—Electrodes. National Cylinder Gas Div., Chicago, Ill.
HOLMES—Submerged-arc flux crusher. Robert Holmes & Bros. Inc., Danville, Ill.
HOLTITE—Granulated bronzing material. The American Brass Co., Waterbury, Conn.
HOPANE—A liquefied gas. Hope Natural Gas Co., Clarksburg, W. Va.
HORNET—A-c arc welder. Air Reduction Sales Co., New York, N. Y.
HOSSFELD—Iron-bending equipment. Hossfeld Mfg. Co., Winona, Minn.
HOT ROD—Electrode oven. Rotir Co., Bell Garden, Calif.
HOT SPARK—Torch lighter and flints. Randall Manufacturing Co., North Kansas City, Mo.
HOT SPOT—Spot, seam and projection welder and resistance welding equipment. Acme Electric Welder Co., Los Angeles, Cal.
HOTMARX—Metal marking crayons. The American Crayon Co., Sandusky, Ohio
HOUGHTO-CLEAN—Metal cleaners and rust removers. E. F. Houghton & Co., Philadelphia, Pa.
HULTGREN—Power furnaces. Ajax Electrothermic Corp., Div., Ajax Metal Co., Trenton, N. J.
HUMPBACK—Furnaces. C. I. Hayes, Inc., Cranston, R. I.
HUNTSMAN—Welding helmets, hand and face shields. Kedman Co., Salt Lake City, Utah
HURRICANE PRESS—Air operated bench press. Studebaker Machine Co., Maywood, Ill.
HURRICLEAN—Steam gun. Oakite Products, Inc., New York, N. Y.
HUSKY BOY—Gas-drive arc welder, air-cooled. Hobart Bros. Co., Troy, Ohio
HYCLASP—Welding cable disconnect splice. Burndy Engineering Co., Inc., Norwalk, Conn.
HYDENT—Cable connectors. Burndy Engineering Co., Inc., Norwalk, Conn.
HYDRO-CHECK—Hydraulic control. The Bellows Co., Akron, Ohio
HYDRO-CLONE—Dust suppressors. Whiting Corp., Harvey, Ill.
HYDROGARDE—Fire extinguishers. Pyrene Manufacturing Co., Newark, N. J.
HYDRO PURE—Catalytic gas purifying devices. National Cylinder Gas Div., Chicago, Ill.
HYDRO-SPEED—Multiple point spot welders. The Taylor-Winfield Corp., Warren, Ohio
HYLINK—Cable connectors. Burndy Engineering Co. Inc., Norwalk, Conn.
HYLUG—Cable connectors. Burndy Engineering Co., Inc., Norwalk, Conn.
HY-LO—Low-hydrogen electrodes. The Champion Rivet Co., Cleveland, Ohio
HYMAG—Magnesium silicate; Foote Mineral Co., Philadelphia, Pa.
HY-POWER—Electrically powered, hydraulically actuated equipment. Hannifin Corp., Des Plaines, Ill.
HYPRESS—Crimping tool. Burndy Engineering Co., Inc., New York, N. Y.
HY-PRESSURE—Welding hose. Goodyear Tire & Rubber Co., Akron, Ohio.
HYTEMP—Protective coatings. Geo. R. Mowat Co., New York, N. Y.
HY-TIN—Paste solder. Farreloy Co., Philadelphia, Pa.
HYTOOL—Crimping tool. Burndy Engineering Co., Inc., New York, N. Y.

I

IDEAL—Various electrical items and tools. Ideal Industries, Inc., Sycamore, Ill.
IDEAL—Face shield and lens. Ideal Face Shield Co., Columbus, Ohio
IDEALARC—All-purpose a-c/d-c welder. Lincoln Electric Co., Cleveland, Ohio
IGNITRON—Timing equipment for resistance welding machines. Westinghouse Electric Corp., Pittsburg, Pa.
ILG—Centrifugal and motor propeller fans, power roof ventilators, automatic shutters and unit heaters. Ilg Electric Ventilating Co., Chicago, Ill.
ILLINOIS—Lead shot. Division Lead Co., Summit, Ill.
ILLIUM—Corrosion resistant electrodes and welding rods. Illium Corp., Freeport, Ill.
IMMUNOL—Metal cleaner and rust preventative. Harry Miller Corp., Philadelphia, Pa.
IMPACTOOL—Electric tool. Ingersoll-Rand Co., New York, N. Y.
IMPACUTTER—Power cutter. Ingersoll-Rand Co., New York, N. Y.
IMPERIAL—Welding gloves. Imperial Glove Mfg. Co., Berlin, Wis.
IMPERIAL—Welding and safety goggles. American Industrial Safety Equipment Co., Inc., Cleveland, Ohio
IMPERSO TANKHEATER—Tank heater. Eclipse Fuel Engineering Co., Rockford, Ill.
IMPROVED OVAL CAP—Torch lighter. Flint Products Co., Brooklyn, N. Y.
IMPROVED ROUND FILE—Welding torch gas lighters. Safety Gas Lighter Co., Lynn, Mass.
INCANDESCENT INTENSIFIER—Welding and inspection lamps. Benjamin Electric Mfg. Co., Des Plaines, Ill.
INCANDESCENT PROJECTOLITE—Welding and inspection lamps. Benjamin Electric Mfg. Co., Des Plaines, Ill.
IN-CEL-ATE—Insulating cement. Mexico Refractories Co., Mexico, Mo.
INCH-MARKED—Electrical metallic tubing. Republic Steel Corp., Steel and Tubes Div., Cleveland, Ohio
INCO—Nickel and nickel-alloy products. International Nickel Co., Inc., New York, N. Y.
INCO-FLUX—Gas welding and brazing flux, International Nickel Co., Inc., New York, N. Y.
INCO-HARD 1—Hardfacing electrode. International Nickel Co., Inc. New York, N. Y.
INCONEL—77-15 nickel-chromium alloy. The International Nickel Co., Inc., New York, N. Y.
INCONEL-CLAD STEEL—Steel plate composed of a layer of solid Inconel. Lukens Steel Co., Coatesville, Pa.
INCO-WELD A—Electrode for welding dissimilar alloys. The International Nickel Co., Inc., New York, N. Y.
INDAIR—Oxygen, argon, acetylene, and hydrogen. Industrial Air Products Co., Portland, Ore.
INDEPENDENT — Acetylene cylinders, acetylene charging or compressing plants, oxygen plants; equipment and fittings of all kinds used in the compression of oxygen, acetylene, propane or other gases. Independent Engineering Co., O'Fallon, Ill.
INDESTRUCTO—Neoprene sheathed cables. National Elec. Products Corp., Pittsburgh, Pa.
INDIANA—Oxygen, acetylene. Indiana Oxygen Co., Indianapolis, Ind.
INDUSTRIAL 38—Metal cleaners. Wyandotte Chemical Corp., Wyandotte, Mich.
INDUSTRIAL—Safety clothing without steel reinforcing. Industrial Gloves Co., Danville, Ill.
INDUSTRIALAIR—Compressor. Joy Mfg. Co., Pittsburgh, Pa.
INDUSTRILINE—Cable connectors and lugs; electrode holders and vulcanizing kits. Cam-Lok Div., Empire Prod., Inc., Cincinnati, Ohio
INDUSTRO—Welding glass. Willson Products, Inc., Reading, Pa.
IND-X—Portable radiographic inspection unit. Ind-X Corp., Seattle, Wash.
INERTARC—Inert gas arc welder. Lincoln Electric Co., Cleveland, Ohio
INNERSHIELD—Automatic shielded arc welder and electrodes. Lincoln Electric Co., Cleveland, Ohio
INSOROD—Self hardening alloy. Resisto-Loy Co., Grand Rapids, Mich.
INSTANT ARC—A-c welder. Marquette Mfg. Co., Inc. Minneapolis, Minn.
INSTO-GAS—Metal melting furnaces; torches and soldering irons. Insto-Gas Corp., Detroit, Mich.
INSUL-LOCK—Cable connectors, cable lugs, cable splicers, crimping tools. Anthony, F. M. Co., Berkeley, Calif.
INSULPIN SYSTEM—Portable stud welder. Graham Mfg. Corp., Needham Heights, Mass.
INSULUG—Cable connectors. Burndy Engrg. Co., Norwalk, Conn.
INTENSARC—Carbon arc welding electrodes. National Carbon Div., Union Carbide Corp., New York, N. Y.
INTERLOX—Extension slide rule. Master Rule Mfg. Co., Middletown, N. Y.
INTERMATIC—Timer controls. International Register Co., Chicago, Ill.
INTERMITTOR—High speed index table. Ferguson Machine & Tool Co., St. Louis, Mo.
INVINCIBLE—Industrial vacuum cleaners, flux recovery equipment and vacuum producers and blowers. Invincible Vacuum Cleaner Mfg. Co., Dover, Ohio.
IPCO—Safety equipment, welding accessories and first aid supplies. Industrial Products Co., Philadelphia, Pa.
IRIDIUM ISOTRON—Isotron for handling of iridium 192. The Gamma Corp., Mansfield, Mass.
IRON GRIP—Steel shelving. Equipto, Aurora, Ill.
IRON LUNG—Industrial roof ventilator. Iron Lung Ventilator Co., Cleveland, Ohio
IRONWELD—Powdered flux for welding cast iron. Sight Feed Generator Co., West Alexandria, Ohio
IRPO—Rust proofer or preventive. Wolfe-Kote Co., Inc., Sheboygan, Wis.
ISOROD—Forgeable self-hardening alloy. Resisto-Loy Co., Grand Rapids, Mich.
ISOVOLT—Stationary constant, potential x-ray equipment. Mitchell Radiation Products Corp., Norristown, Pa.

J

JM—Asbestos, fire bricks, asbestos safety clothing, refractories. Johns-Manville, New York, N. Y.
JM—Sodium silicate. E. I. duPont de Nemours & Co., Inc., Wilmington, Del.
JACKSON—Insulated and semi-insulated electrode holders and a complete line of adjustable eye-shields and hoods. Jackson Products, Air Reduction Sales Co., Warren, Mich.
JACQUET—Indicator for measuring slow linear welding speeds. Herman H. Sticht Co., Inc., New York, N. Y.
JEMCO "C40"—Hardfacing rods. Armite Laboratories, Los Angeles, Calif.

JET-CUT—Grinding wheels. Robertson Mfg. Co., Morrisville, Pa.
JET FLUX—Liquid flux system. All-State Welding Alloys Co., Inc., White Plains, N. Y.
JET-GAS—Propane. Burdett Oxygen Co., Cleveland, Ohio
JET-HARD—Bu-90 iron-powder electrode. The Lincoln Electric Co., Cleveland, Ohio
JET-O-MATIC—Automatic light duty oxyacetylene torch. Marquette Mfg. Co., Inc., Minneapolis, Minn.
JETWELD—Iron-powder electrodes. Lincoln Electric Co., Cleveland, Ohio
JEWEL—Pipe clamps. The Jewel Mfg. Co., St. Paul, Minn.
JEWEL—Coated abrasives. Abrasive Products, Inc., South Braintree, Mass.
JEWEL BRAND WELDISK—Aluminum oxide coated abrasive disc. Abrasive Products, Inc., South Braintree, Mass.
JEWELOX—Coated abrasive in rolls, belts, disc and sheet form. Abrasive Products, Inc., South Braintree, Mass.
JIFFY—Brazing outfits. Modern Engineering Co., St. Louis, Mo.
JIFFY—Hand torches. Mahr Mfg. Co., Div. Diamond Iron Works Inc., Minneapolis, Minn.
JIFFY—Metal disintegrator. Jiffy Disintegrators, Inc., Detroit, Mich.
JOHNSON'S—Soldering fluid, flux and paste rust remover and cleaner. Johnson Mfg. Co., Inc., Mount Vernon, Iowa
JOMAC—Welding gloves. C. Walker Jones Co., Philadelphia, Pa.
JONES—Power transmission equipment. Hewitt-Robins, Inc., Stamford, Conn.
JORGENSEN—Welders clamps, steel bar clamps, "C" clamps, etc. Adjustable Clamp Co., Chicago, Ill.
JUBILEE—Oxyacetylene hose. New York Belting & Packing Co., Passaic, N. J.
JUMBO—Machine cutting torch and tips. Harris Calorific Co., Cleveland, Ohio
JUMBO—Torch lighters and flints. Flint Products Co., Brooklyn, N. Y.
JUNIOR—A-c arc welders. Mid-States Welder Mfg. Co., Chicago, Ill.
JUNIOR—Portable arc welder. Shober, Inc., Stockton, Calif.
JUNIOR-PR—Pipe rotator. Cecil C. Peck Co., Cleveland, Ohio
JUNIOR—Soldering gun. Weller Electric Corp., Easton, Pa.
JUNO—Vises. Wilton Tool Mfg. Co., Schiller Park, Ill.
JUSTRITE—Fire extinguishers. Justrite Mfg. Co., Chicago, Ill.

K

K-G—Welding and cutting apparatus. K-G Equipment Co., Inc., Allentown, Pa.
KSM—Arc welding studs, electric arc stud welders, parts and accessories. KSM Prod., Inc., Merchantville, N. J.
K-ARC—Electrode coating materials. Foote Mineral Co., Inc., Philadelphia, Pa.
K BOND—Grinding wheel. Norton Co., Worcester, Mass.
K MONEL—Nickel-copper aluminum heat-treatable alloy. The International Nickel Co., Inc., New York, N. Y.
KO—Resistance welding electrode holders. P. R. Mallory & Co., Inc., Indianapolis, Ind.
K SERIES—Welding and brazing alloys and fluxes. All-State Welding Alloys Co., Inc., White Plains, N. Y.
K TUNGSTEN—Special tungsten for inert gas shielded arc welding electrodes. P. R. Mallory & Co., Inc., Indianapolis, Ind.
KAISER—Aluminum welding cable. Kaiser Aluminum & Chemical Sales, Inc., Oakland, Calif.
KAJON—Air actuated C-clamp. The Burklyn Co., Los Angeles, Calif.
KAM KLAMPS—Pressure clamps for use on jigs and fixtures. Lapeer Mfg. Co., Lapeer, Mich.
KAM-LOCK—Shutoff valve. Eclipse Fuel Engineering Co., Rockford, Ill.
KANDEL—Arc-oxygen electric underwater cutting torch. Craftsweld Equipment Corp., Long Island City, N. Y.
KANO—Rust remover and rust preventive. Kano Laboratories, Nashville, Tenn.
KANOX—Oxygen and acetylene. Kansas Oxygen, Inc., Hutchinson, Kan.
KAPTRODE—Resistance welding cap electrodes. WW Alloys, Inc., Detroit, Mich.
KARSEAL—Cast iron solder. All-State Welding Alloys Co., Inc., White Plains, N. Y.
KARTIN—Tinning compound. All-State Welding Alloys Co., Inc., White Plains, N. Y.
KASIL—Potassium silicate and electrode coating materials. Philadelphia Quartz Co., Philadelphia, Pa.
KEEN-ARC—Copper coated and cored carbon electrodes. Becker Bros. Carbon Co., Cicero, Ill.
KEEN-CUT—D-c welding carbon. Becker Bros. Carbon Co., Cicero, Ill.
KEEN-CUT—Carbon gouging electrode. Becker Bros. Carbon Co., Cicero, Ill.
KEENWELD—Brazing alloys and fluxes. All-State Welding Alloys Co., Inc., White Plains, N. Y.
KELEKET—X-ray equipment. Kelley-Koett Mfg. Co., Covington, Ky.
KEL-F—Plastic laminate. M. W. Kellogg Co., New York, N. Y.
KEL-RAY—Radiographic (gamma-ray) projector. Metal & Thermit Corp., Rahway, N. J.
KELLEY-KOETT—X-ray equipment, accessories and supplies. Kelley-Koett Mfg. Co., Inc., Covington, Ky.
KELLOGG-AMERICAN—Air compressors. American Brake Shoe Co., Kellogg Div., Rochester, N. Y.
KENCO—Punch presses, rotary tables, cutoff saws, and milling vises. Kenco Mfg. Co., Los Angeles, Calif.
KENT—Flux recovery unit. The Kent Co., Inc., Rome, N. Y.
KENTRALL—Hardness tester. The Torsion Balance Co., Clifton, N. J.
KERK-ALOY—Hardfacing alloy. Kerk-Aloy Co., Bloomington, Ind.
KEROTEST—Valves, cylinder and piping. Kerotest Manufacturing Co., Pittsburgh, Pa.
KESTER—Solders and fluxes, solder paddles. Kester Solder Co., Chicago, Ill.
KEY-BAK—Reeled chain for holding keys, spark-lighter, etc. Lummis Mfg. Co., Pasadena, Calif.
KEYSTONE—Bench vises. Hollands Mfg. Co., Erie, Pa.
KIDDE—Fire extinguishers. Walter Kidde & Co., Inc., Detroit, Mich.
KILOTRON—High-frequency induction-heating equipment. Electric Arc Inc., Newark, N. J.
KIMBALL—Weldors' aprons, gloves, goggles, helmets, leather suits, leggings, sleeves, metal arm protectors, sweat pads, lens and cover plates. Kimball Safety Products Co., Cleveland, Ohio.
KIMTINT—Welding lenses. Kimball Safety Prod. Co., Cleveland, Ohio
KINGSPAR—Electrode coating material. Foote Mineral Co., Inc., Philadelphia, Pa.
KINMONT UNIVERSAL POWER UNIT—Welding positioner and power source. Roylyn, Inc., Glendale, Calif.
KIRKSITE A—Die metal alloy. Morris P. Kirk & Son, Inc., Los Angeles, Calif.
KLAMPACTO—Quick acting toggle type "C" clamp. Lapeer Mfg. Co., Detroit, Mich.
KLEANAIR—Respirators. Safety Equipment Service Co., Cleveland, Ohio
KLEANROD—Soldering fluxes. E. I. du Pont de Nemours & Co., Grasselli Chemicals Dept., Wilmington, Del.
KLEANWELD—Fluxes for aluminum castings, cast iron, brass and bronze welding of malleable iron, brass or bronze welding of cast iron. K-G Equipment Co., Inc., Allentown, Pa.
KLEM—Cleaner. Klem Chemicals, Inc., Dearborn, Mich.
KLING—Shears and presses. Kling Bros. Engineering Works, Chicago, Ill.
KNOCK-OUT—A-c arc welders, arc torches. K. O. Lee Co., Aberdeen, S. D.
KNU-LOK—Toggle type pliers. Lapeer Mfg. Co., Detroit, Mich.
KNU-SINE—Bar base toggle-clamps. Lapeer Mfg. Co., Detroit, Mich.
KNU-VISE—Toggle clamps and pliers. Lapeer Manufacturing Co., Detroit, Mich.
KODAK—Industrial x-ray films. Eastman Kodak Co., Rochester, N. Y.
KOLD POINT—Water-cooled electrodes. American Electric Fusion Corp., Chicago, Ill.
KOOL MITT—Asbestos and leather mitt. Singer Glove Mfg. Co., Chicago, Ill.
KOOLITE—Air gas torches. National Welding Equip. Co., San Francisco, Cal.
KOOLPAD—Sweat bands. Standard Safety Equipment Co., Chicago, Ill.
KOOLPORE—Grinding wheels. Bay State Abrasive Prod. Co., Westboro, Mass.
KOP-R-ARC—Welding rods. Krembs & Co., Chicago, Ill.
KOPPER KORE—Electric soldering iron. Kwikheat Mfg. Co. Glendale, Calif.
KORKER—Oxyacetylene hose. Quaker Rubber Corp., Philadelphia, Pa.
KORNER-KLAMP—Welding clamp. Thermacote Co., Los Angeles, Calif.
KORR-STUDS—Welding studs. KSM Products, Inc., Merchantville, N. J.
KRAFTGUARD—Goggles. Chicago Eye Shield Co., Chicago, Ill.
KRE-CO—Brazing alloy rings and soldering and welding fluxes. Charles W. Krieg Co., Newark, N. J.
KROME-KOTE—Rust remover and sealer. Wolfe-Kote Co., Inc., Sheboygan, Wis.
KROMEWELD—Flux for welding stainless steels and stainless iron. Air Reduction Sales Co., New York, N. Y.
KROMOVER—Tinning pencil. All-State Welding Alloys Co., Inc., White Plains, N. Y.
KROMOX—Chrome nickel steel rod for oxyacetylene welding. Central Steel & Wire Co., Chicago, Ill.
KUT-MOR—Portable motor driven gas cutting machine. Gaso Equipment Co., Chicago, Ill.
KUTALL—Hack saw blades. Spartan Saw Works, Inc., Springfield, Mass.
KWIKFLUX—Silver brazing fluxes. Special Chemicals Corp., Ossining, N. Y.
KWIK-HEAT—Electric soldering iron. Kwikheat Mfg. Co., Glendale, Calif.
KWIK-HEAT "TYPE 400"—Electric soldering iron. Kwik-heat Mfg. Co., Glendale, Calif.
KWIK-KLAMP—Adjustable clamp. Danly Machine Specialties, Inc., Chicago, Ill.

L

L. A. ALUMINUM BRAZING FLUX TYPE I—Aluminum brazing flux. Canadian Liquid Air Co., Ltd., Montreal, Canada
LC-3—Liquid-oxygen cylinder. Linde Co., New York, N. Y.
L NICKEL—Low-carbon form of nickel. International Nickel Co., Inc., New York, N. Y.
LC—Liquid cooled arc welding system. Bernard Welding Equipment Co., Chicago, Ill.
LP—Form mixing low pressure gas and air. Eclipse Fuel Engineering Co., Rockford, Ill.
L-T-B-50—Plastic head rest spectacle. Jackson Products Co., Warren, Mich.
LWZ—Line arc magnetic contactors. The Electric Controller & Manufacturing Co., Cleveland, Ohio
LA-CO—Paste solders. Lake Chemical Co., Chicago, Ill.
LAC-O-NU—Metal cleaner and sealer. Nu Steel Co., Chicago, Ill.
LADY'S MAN—Steel tape rule. Master Rule Mfrg. Co., Middletown, N. Y.
LAPEER—Toggle action clamps and pliers and "C" clamps. Lapeer Mfg. Co., Detroit, Mich.
LARKIN—A-c welders. Resistance spot, butt, seam, flash and projection welders and gun welders, arc torch, welder's protective cloth and accessories. Larkin Welder & Machine Corp., Brooklyn, N. Y.
LEADER 550—Automatic welder. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
LEAK-PRUF—Acid Core Solder. Alpha Metals Inc., Jersey City, N. J.
LECTRO-SHEAR—Electrically operated shear. Black and Decker Mfg. Co., Towson, Md.
LED-PLATE NO. 250—Compound-leadbase and anti-seize seal'ing (threads). Armite Laboratories, Los Angeles, Calif.
LE-HI—Clamps, couplings, fitting unions, and valves. Hose Accessories Co., Phila., Pa.
LENAPE RED MAN—Seamless forged welding necks, sweep type boiler nozzles, elliptical handhole and manhole saddles, rings and fittings, special press-formed members for welded constructions in pressure vessels, machinery and transportation equipment. Lenape Hydraulic Pressing & Forging Co., West Chester, Pa.
LEPEL—High-frequency induction heating units. Lepel High Frequency Laboratories, Inc., New York, N. Y.
LEVOLIER—Electric switches. McGill Mfg. Co., Inc., Valparaiso, Ind.
LEWIS—Wire straightening and cutting machines. The Lewis Machine Co., Cleveland, Ohio
LEWIS—Automatic welding equipment. Lewis Welding & Engineering Corp., Bedford, Ohio
LIBERTY—Fibre welding helmet. Welding Engineering Co., Milwaukee, Wis.
LICHTMAN—Leather for welder's clothing. J. Lichtman & Sons, Newark, N. J.
LIFE GUARD—Linemen's safety hat. Jackson Products. Air Reduction Sales Co., Warren, Mich.
LIFEGUARD—Safety valve for press application. Ross Operating Valve Co., Detroit, Mich.
LIFELONG—Welding torch bodies and cutting assemblies. Smith Welding Equip. Corp., Minneapolis, Minn.
LIFETIME—Sheet, plate, wire, rod, bar, structural shapes, extrusions, tubing, aluminum products, etc. Reynolds Metals Co., Louisville, Ky.
LIFT-FRONT—Weldor's goggles. Burdett Oxygen Co., Cleveland, Ohio
LIFT STACKER—Hand and electric lift truck. Grand Specialties Co., Chicago, Ill.
LIGHTWELD—Welding electrode. Lincoln Electric Co., Cleveland, Ohio
LIN-DE-SURFACER—Machines for the mechanized oxyacetylene conditioning of steel. Linde Co., New York, N. Y.
LINCOLN—Electric arc welding equipment and accessories. Lincoln Electric Co., Cleveland, Ohio
LINCOLNDUCTOR—Welding cable. Lincoln Electric Co., Cleveland, Ohio
LINCOLNWELD—Submerged arc welder. Lincoln Electric Co., Cleveland, Ohio
LINCONTROL—A foot operated welding control. Lincoln Electric Co., Cleveland, Ohio
LINC-THAW—Pipe thawing control. Lincoln Electric Co., Cleveland, Ohio
LINCWELDER—A-c and d-c farm welders. Lincoln Electric Co., Cleveland, Ohio
LINDE—Gases, Mig welding equipment, powder and flame spraying equipment, steel conditioning machines, jet-piercing, plate-edge and cold-treatment equip. Linde Co., New York, N. Y.
LINDOX—Oxygen. Linde Co., New York, N. Y.
LINE-ARC—Resistance welder contactors. Electric Controller & Mfg. Co., Cleveland, Ohio
LINK—Welding machines. Link Welder Corp., Detroit, Mich.
LIQUAMATTE—Wet abrasive blasting equipment. Techline Div. of Wheelabrator Corp., Vicksburg, Mich.
LIQUID—Acetylene, oxygen, hydrogen, and welding grade carbon dioxide. Liquid Carbonic Div., General Dynamics Corp., Chicago, Ill.
LIQUIDARC—Arc welders. Liquid Carbonic Div., General Dynamics Corp., Chicago, Ill.
LIQUID HEAT—Salt bath material. E. F. Houghton & Co., Phila, Pa.
LIQUIDFLOW—Carbon dioxide, liquid. Liquid Carbonic Div., General Dynamics Corp., Chicago, Ill.
LIQUIDOX—Oxygen, liquid; liquid oxygen containers. Liquid Carbonic Div., General Dynamics Corp., Chicago, Ill.
LIQUID WELD—Gas welding and cutting apparatus. Liquid Carbonic Div., General Dynamics Corp., Chicago, Ill.

LIQUID-WIRE—Copper paste for furnace brazing. Superweld Corp., North Hollywood, Calif.
LIQUIFLUX—Liquid flux for soldering and brazing. The Sight Feed Generator Co., West Alexandria, Ohio
LIQUIFLUXER—Liquid flux dispenser. The Sight Feed Generator Co., W. Alexandria, Ohio
LIQUI-JECTOR—Liquid removal from air and gas lines. Selas Corp. of America, Dresher, Pa.
LIQUI-MED—Inhalation therapy regulators and accessories. Liquid Carbonic Div., General Dynamics Corp., Chicago, Ill.
LITECOTE—Mild steel electrode. Harnischfeger Corp., Milwaukee, Wis.
LITEWATE—Goggles. Sellstrom Mfg. Co., Palatine, Ill.
LITE-WEIGHT—Propane cylinders. Harrisburg Steel Corp., Harrisburg, Pa.
LITHABOND—Electrode coating materials. Foote Mineral Co., Inc., Philadelphia, Pa.
LITTLE BERTHA—Preheating torch. L. B. White Co., Onalaska, Wis.
LITTLE BLACKSMITH — Metalworking machines. J. F. Kidder Mfg. Co., Inc., Burlington, Vt.
LITTLE GEM—Drawer cabinets. Equipto, Aurora, Ill.
LITTLE GEORGE—Universal ram-type welder. Cecil C. Peck Co., Cleveland, Ohio
LITTLE GIANT—Kit, carrying, oxy-acetylene apparatus. Liquid Carbonic Div., General Dynamics Corp., Chicago, Ill.
LITTLE GIANT—Electric arc welder. Precision Welder Mfg. Co., Chicago, Ill.
LITTLE JOE—Welder's seat and tool tray. Clinton Prod. Co., Clinton, Mich.
LITTLE PAL—Acetylene generator. Modern Engineering Co., St. Louis, Mo.
LLOYD'S—Soldering fluid and flux. Johnson Mfg. Co., Mount Vernon, Iowa
LOADING DOCK SHIELD—Dock shield. Frommelt Industries, Dubuque, Iowa
LOCKWELD—Welding electrodes. Larkin Welder & Machine Corp., Brooklyn, N. Y.
LO-CRO—Electrodes for chromium steel. Crucible Steel Co. of America, Harrison, N. J.
LO-FLO—Silver solders. Goldsmith Bros. Smelting and Refining Co., Chicago, Ill.
LO-MELT COPPER—Phos-copper alloy. Canadian Liquid Air Co., Ltd., Montreal, Que., Canada.
LONGBOY—50 ft. rule. Master Rule Mfg. Co., Middletown, N. Y.
LONGRIP—Extractors and reamers. The Ridge Tool Co., Elyria, Ohio
LONG-LIFE—Plastic cover lens. Sellstrom Mfg. Co., Palatine, Ill.
LONG TANGENT—Pipe welding fittings. Midwest Piping & Supply Co., Inc., St. Louis, Mo.
LOOKS—Goggles. Mine Safety Appliances Co., Pittsburgh, Pa.
LORVIS—Automatic clamp wrench. Blackford Mfg. Co., Inc., Hartford City, Ind.
LOW AMP—Bronze electrodes. Eutectic Welding Alloys Corp., Flushing, N. Y.
LOW TEMP—Brazing rods. Eutectic Welding Alloys Corp., Flushing, N. Y.
LOW TEMPERATURE No. 1100—Silver brazing fluxes. The American Platinum & Silver Div., Newark, N. J.
LOW TEMPERATURE WELDING ALLOYS—Brazing alloys. Eutectic Welding Alloys Corp., Flushing, N. Y.
LOXETTE 3000—Liquid-oxygen cylinder. Cambridge Corp., Lowell, Mass.
LUBRO-CONTROL—Filter-lubricator-regulator. Norgren, Co., C. A., Englewood, Colo.
LUBRI-AIR—Pneumatic lubricators, filters and regulators. The Bellows Co., Akron, Ohio
LUG-SET—Cable lug attachment equipment and cable splicers. Tweco Products, Inc., Wichita, Kans.
LUKENS—Clad steel. Lukens Steel Co., Coatesville, Pa.
LUKENWELD—Fabrication, jacketed steel driver rolls. Lukens Steel Co., Coatesville, Pa.
LUTZ—Handles, hammer, hatchet, file, chisel and axe. Lutz File & Tool Co., Cincinnati, Ohio
LUXIFLUX—Nonoxidizing corrective flux. Special Chemical Corp., Ossining, N. Y.
LYON—Welding benches and tables. Lyon Metal Products, Inc., Aurora, Ill.
LYSTON—Soldering flux. Farrelloy Co., Philadelphia, Pa.

M

M-1—Acetylene compressing units. Sight Feed Generator Co., West Alexandria, Ohio
M-3B—Cutting torch. K-G Equipment Co., Inc., Allentown, Pa.
M-B—Airline filters and lubricators, air pressure regulators and portable pneumatic grinders. M-B Products, Detroit, Mich.
MF—Magnetic flux and semiautomatic arc welder. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
MG—X-ray inspection unit. Philips Electronics, North American Philips Co., Mt. Vernon, N. Y.
MGC—Battery chargers generating equip., aircraft energizers, etc. Hobart Bros. Co., Troy, Ohio
MMM—Load scale. Manning, Maxwell & Moore, Inc., Muskegon, Mich.
MMM—Coated abrasive, adhesives, masking tape, etc. Minnesota Mining and Mfg. Co., St. Paul, Minn.
MS—Single port weld, and portable x-ray units. Mitchell Radiation Products Corp., Norristown, Pa.
MSA—Welding helmets, protective hats, coated covered glass, airline respirators, goggles, first aid kits, fire blankets, weldors' leather clothing, weldors' ear protectors, gas detectors and indicators and metal fume respirators. Mine Safety Appliances Co., Pittsburgh, Pa.
MSA-LAMB—Venturi type air-venting apparatus. Mine Safety Appliances Co., Pittsburgh, Pa.
M & T—Welding machines and welding accessories. Metal & Thermit Corp., Rahway, N. J.
MTV—Adjustable gas welding tip. L. B. White Co., Onalaska, Wis.
MX—Depressed center wheels and disc. Carborundum Co., Niagara Falls, N. Y.
MACHLETT—Electronic tubes and tubes for induction-brazing equipment. Machlett Laboratories, Inc., Springdale, Conn.
MACK-FLEX—Flexible grinding wheels. Macklin Company, Jackson, Mich.
MACKLIN—Abrasive grinding wheels. Macklin Co., Jackson, Mich.
MAGBOND—Colloidal gelatinous binder and lubricant. Foote Mineral Co., Philadelphia Pa.
MAGIC—Positioners. Standard Portable Cord Co., Mayville, N. Y.
MAGNAFLUX—Magnetic particle inspection equipment. Magnaflux Corp., Chicago, Ill.
MAGNAGLO—Fluorescent magnetic particle inspection equipment. Magnaflux Corp., Chicago, Ill.
MAGNAGROUND—Magnetic ground clamp. Dings Magnetic Separator Co., Milwaukee, Wis.
MAGNA-LENS—Lenses for weldors' helmets. The Magna Industrial Lenses Co., Holdenville, Okla.
MAGNALOY — Hardfacing and work-hardening alloys for gas and arc. Superweld Corp., North Hollywood, Calif.
MAGNA-LYTE—Portable welding gun. Progressive Welder Sales Co., Pontiac, Mich.
MAGNAWELD—Hardsurfacing electrode. Lincoln Electric Co., Cleveland, Ohio
MAGNA-TONE NM — Manganese steel rebuilding alloy. Resisto-Loy Co., Grand Rapids, Mich.
MAGNA-TRAN—Welder for inert gas and a-c/d-c welding. Mid-States Welder Mfg. Co., Chicago, Ill.
MAGNA—Semiautomatic welder. Auto Arc-Weld Mfg. Co., Cleveland, Ohio
MAGNE—Magnetic ground clamp. Magne Cast Tool Co., Inc., Chicago, Ill.
MAGNECOTE—Hardfacing flux. Stoody Co., Whittier, Calif.
MAGNETRODE — Magnetic ground. MagneTrode Corp., Kansas City, Mo.
MAGNI RAY—Illuminated magnifier. George Scherr Co., Inc., New York, N. Y.
MAGNOLIA—Babbitt Metals. Magnolia Metal Co., Elizabeth, N. J.
MAGNOLIA—Welding and cutting equipment, accessories, supplies, etc. Air Reduction Sales Co., New York, N. Y.
MAG-TOOL—Magnetic plate clamp. Magnetic Tool Corp., Santa Clara, Calif.
MAHR—Oil burning preheating torches, oil gas and electric industrial furnaces and equipment. Mahr Mfg. Co., Minneapolis, Minn.
MAINLINER—250 amp DC water cooled welder. Hobart Bros. Co., Troy, Ohio
MAINTAIN-A-CONTOUR — Dresser for aluminum welding electrodes. S-M-S Corp., Detroit, Mich.
MAJOR—Rubber covered welding cable. National Cable Corp., Milwaukee, Wis.
MALLORY 3, 22, 53B, 73, 100—Copper alloys used in resistance welding applications. P. R. Mallory & Co., Inc., Indianapolis, Ind.
MALLORY 100M & 100W—High conductivity refractory materials used in resistance welding. P. R. Mallory & Co., Inc., Indianapolis, Ind.
MALTESE CROSS—Hose. Hewitt-Robins, Inc., Stamford, Conn.
MANG-ARC—Nickel manganese electrodes. Alloy Rods Co., York, Pa.
MANGALLOY—Welding rods, bars, and plates. Ford Steel Co., St. Louis, Mo.
MANGALOY—Multi-pass hardfacing rods. Industrial Overlay Metals, Inc., Eaton, Ohio
MANGALOY RX—Build up on manganese. Industrial Overlay Metals, Inc., Eaton, Ohio
MANGANAL—Manganese nickel steel electrodes, wedge bars, applicator bars, plates. Stulz-Sickles Co., Newark, N. J.
MANGANEND—Electrodes for welding high carbon, low alloy high tensile and free machining steels. Arcos Corp., Philadelphia, Pa.
MANGANICK—Cold-drawn and heat treated electrode. Hobart Brothers Co., Troy, Ohio
MANGANWELD—Hardfacing electrodes. Lincoln Electric Co., Cleveland, Ohio
MANGA-KOTE—Nickel-manganese electrode. Resisto-Loy Co., Inc., Grand Rapids, Mich.
MANGA-TONE NM—Alloyed rod. Resisto-Loy Co., Grand Rapids, Mich.
MANGJET—Hardsurfacing electrode. Lincoln Electric Co., Cleveland, Ohio
MANGO-PLATE—Alloy steel plate for severe wear and inspect problems. Pyramid Steel Co., Cleveland, Ohio
MANG-TRODE—Manganese-bronze electrode. Ampco Metal, Inc., Milwaukee 46, Wis.
MANHATTAN—Abrasive wheels, hose. The Manhattan Rubber Mfg. Div., Raybestos, Manhattan, Inc., Passaic, N. J.
MANSOL—Brazing alloys. Mansol Ceramics Co., Belleville, N. J.
MAN-TEN (USS)—Steel. United States Steel Corp., Pittsburgh, Pa.
MANUAL LINCOLN WELD—Semi-automatic submerged arc welder. Lincoln Electric Co., Cleveland, Ohio
MARCO—Electrodes and welding wire. Morgan Aluminum Welding Rod Co., Mt. Carmel, Pa.
MARISON—Compressed gas cylinders. The Marison Co., South Elgin, Ill.
MARKAL PAINT STICKS—Industrial paint markers in stick form. Markal Co., Chicago, Ill.
MARQ-ROD—Powdered- iron electrode. Marquette Mfg. Co., Inc., Minneapolis, Minn.
MARQUETTE—Portable spot welders, cable connectors, ground clamps, electrodes, helmets and lenses, silver-soldering kits. Marquette Manufacturing Co., Inc., Minneapolis, Minn.
MARSH—Gauges. James P. Marsh Corp., Skokie, Ill.
MAR-TEMP—Heat treating salts and quenching oils. E. F. Houghton & Co., Philadelphia, Pa.
MARTIN—Automatic welding machines, portable gun welders, spot projection type welding machines, rocker arm welder, and presstype welders, welding transformers and welding cable. Martin Electric Co., Detroit, Mich.
MARVEL—Portable blowers, exhaust blowers, forge blowers, and ventilating fans. Electric Blower Co., Boston, Mass.
MARVEL—Brazing fluxes. Air Reduction Sales Co., New York, N. Y.
MARVEL—Cutters, bolts and rod, wire, hack saw machines, band saws, hack saws and machinist's vises. Armstrong-Blum Mfg. Co., Chicago, Ill.
MARVEL—Sanding discs. Bates Products, Inc., Chicago, Ill.
MASTAIR—Valve. Hanna Engineering Works, Chicago, Ill.
MASTER—Electrode holders. Martin Wells, Inc., Los Angeles, Calif.
MASTER—Wire wheel brushes. The Osborn Manufacturing Co., Cleveland, Ohio
MASTER MECHANIC KIT—Welding and cutting outfits. Burdett Oxygen Co., Cleveland, Ohio
MASTER POWER—Portable pneumatic tools. Master Pneumatic Tool Co., Inc., Cleveland, Ohio
MASTER WELDER—Welding gloves. Hanover Glove Co., Hanover, Pa.
MATRIX—Electrode for alloy and cast steels. Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
MAURATH — Flux-coated alloy-steel electrodes. Maurath, Inc., Cleveland, Ohio
MAZLO — Welding rods. American Magnesium Corp., Cleveland, Ohio
McCABE—Pneumatic flanging machines. McCabe Mfg. Co., Lawrence, Mass.
McCANN—Stress relieving furnaces. Young Brothers Co., Cleveland, Ohio
McCLARY—Electrode holders. McClary & Buyers Equipment Co., Oakland, Calif.
MAC DONALD — Hardfacing electrodes. Shober Inc., Stockton, Calif.
McDONALD "BURTWELD"—Lenses. B. F. McDonald Co., Los Angeles, Calif.
McKAY—Shielded arc welding electrodes. The McKay Co., Pittsburgh, Pa.
McKAY—Valves for high pressure gas cylinders. Linde Co., New York, N. Y.
McKEE ECLIPSE—Furnaces, blast burners, tips and nozzles and igniters. Eclipse Fuel Engrg. Co., Rockford, Ill.
MEASURRENCH—Torque indicating wrench. J. H. Williams & Co., Buffalo, N. Y.
MEC-CON—Welding cable connector. Tweco Products, Inc., Wichita, Kansas
MECHANICAL CONNECTORS—Cable connectors. National Electric Products Co., Pittsburgh, Pa.
MECHANICAL DRAFTSMAN—Pipe-contouring machine. Steffan Mfg. Corp., Salem, Ohio
MECHANICS ROLLS—Aluminum oxide cloth rolls. Clover Manufacturing Co., Norwalk, Conn.
MECHANI-CUTS—Power hack saws. Peerless machine Co., Racine, Wis.
MECO—Welding and cutting apparatus and supplies, accessories, preheating torches, acetylene generators, electric welding accessories, etc. Modern Engineering Co., St. Louis, Mo.
MECH MASTER—"C" Clamps and machine vises. Mechanics Engineering Co., Jackson, Mich.
MELTERAMA—Tar kettle burner. Weldit, Inc., Detroit, Mich.
MELTOMATIC—Tinning compounds. Wayne Chemical Products Co., Detroit, Mich.
MERCURY—Electric soldering irons. Vulcan Electric Co., Danvers, Mass.
MERIT METAL—Babbitt metal. Federated Metals Div., American Smelting & Refining Co., New York, N. Y.
MERIX DRY-CRISP—Rust preventive. Merix Chemical Co., Chicago, Ill.
MESTA-THOMPSON-GIBB—Flash welder. Mesta Machine Co., Pittsburgh, Pa.
MESURFLO—Flow volume control. Hays Mfg. Co., Erie, Pa.
METAL BOND—Soldering and welding fluxes, hard and aluminum solder. Metal Bond Mfg. Co., Montgomery City, Mo.
METAL FILLER—For coating welds on cast iron. Hobart Bros. Co., Troy, Ohio
METALITE—Aluminum oxide coated abrasive. Behr-Manning Corp., Troy, N. Y.
METALKLAD—Arc welding lens. American Agile Corp., Cleveland, Ohio
METALLIZER—Gun for spraying surfaces with metal. Metallizing Co. of America, Inc., Chicago, Ill.
METAL MARK—Metal marking crayons. The American Crayon Co., Sandusky, Ohio
METAL MASTER—Welder. Clinton Machine Co., Clinton, Mich.

METAL POWDERS—Hoeganaes Sponge Iron Corp., Riverton, N. J.
METALMASTER—Welding, cutting and metal-treating apparatus. Linde Co., New York, N. Y.
METALSET—Epoxy resin cement. Smooth-On Mfg. Co., Jersey City, N. J.
METALSPRAY—Metal spraying gun, also metal spraying equipment. Metalspray Co., Inc., Los Angeles, Calif.
METAL ZIPPER—AC arc welder. Mid-States Welder Mfg. Co., Chicago, Ill.
METCO—Metallizing guns and equipment. Metallizing Engineering Co., Westbury, L. I., N. Y.
METHASPEC — Spectacle type plastic goggle. Watchemoket Optical Co., Providence, R. I.
MET-L-CHEK—Dye-penetrant inspection. The Met-L-Chek Co., Los Angeles, Calif.
METRO—Welding helmets, hand shields, goggles. Metro Manufacturing Co., Long Island, City, N. Y.
METRON—Spot welders. Metron Instrument Co., Denver, Colo.
METROWELD—Filter-lens for goggles, helmets and handshields. Metro Mfg. Co., Long Island City, N. Y.
METSO METAL CLEANERS — Philadelphia Quartz Co., Philadelphia, Pa.
MEZURALL—Chrome-clad tape rules. The Lufkin Rule Co., Saginaw, Mich.
MICHEL—Weld-timer. The Central Sales Corp., Chicago, Ill.
MICRELAY—Ultra-sensitive electronic relay. Ebert Electronics Corp., Queens Village, N. Y.
MICRO-BLAST—Liquid blasting machines. The Lewis Welding & Engineering Corp., Bedford, Ohio
MICRO-FILM—Brazing and soldering alloys. Fusion Engineering Co., Cleveland, Ohio
MICROMETRIC — Speed control valves. Hannifin Corp., Des Plaines, Ill.
MICRO TOM-ATIC—Slicing and dicing machine. The Do All Co., Des Plaines, Ill.
MICRO-WELD—Spot, butt and flash welders. Micro Products Co., Chicago, Ill.
MIDGET—Spot and butt welders. Universal Electric Sales Corp., Cleveland, Ohio
MIDGET TRIPLOC—Plugs and receptacles. Pyle-National Co., Chicago, Ill.
MIDGET UNIVERSAL — Welding torches. Modern Engineering Co., Inc., St. Louis, Mo.
MID-STATES—AC arc welders, carbon arc torches and high frequency arc stabilizers. Mid-States Welder Mfg. Co., Chicago, Ill.
MIDWEST—Fabricated piping, and pipe welding fittings. Midwest Piping and Supply Co., St. Louis, Mo.
MIGHTY-MIDGET—Portable acetylene generators. John R. R. Miles, Inc., Minneapolis, Minn.
MIKALOID—Plastic goggles. Burdett Oxygen Co., Cleveland, Ohio
MIL-AIR—Oxy-gas cutting torch. Universal Cutting & Welding Equipment Mfg. Co., Ft. Lauderdale, Fla.
MILBURN—Oxyacetylene welding and cutting equipment and accessories. Milburn, Alex., Inc., Baltimore, Md.
MILES—Portable welding and cutting torches, regulators, acetylene generators. John R. R. Miles, Inc., Minneapolis, Minn.
MILFORD—Hack saw blades, metal cutting band saw blades. Henry G. Thompson & Co., New Haven, Conn.
MILLER—A-c and Tig a-c transformer welders, SR selenium rectifier type d-c welders, a-c combination welding and gasoline driven generators, portable spot welders and submerged arc a-c transformer welders. Miller Electric Mfg. Co., Appleton, Wis.
MILLER—Air and hydraulic cylinders, accumulators and boosters. Miller Fluid Power Co., Melrose Park, Ill.
MILLER REACTANCE ARC—A-c electric arc welders. Miller Electric Mfg. Co., Inc., Appleton, Wis.
MILWAUKEE — Portable electric drills, sanders, grinders and hammers. Milwaukee Electric Tool Corp., Milwaukee, Wis.
MINERALIGHT—Black light unit for inspection of flaws, etc. Ultra-Violet Products, Inc., South Pasadena, Calif.
MITEY MITE—Portable air compressors, airline lubricators and fittings, pneumatic drills, portable hose, couplings and fittings. Superior Pneumatic Div., Cleveland, Ohio
MINIRELAY—Miniature mercury plunger relay. Ebert Electronics Corp., Queens Village, N. Y.
MINUTE MAN—Welding positioner. The du Mont Corp., Greenfield, Mass.
MIRACLE PASTE — Hardfacing paste. Mir-O-Col Alloy Co., Los Angeles, Calif.
MIR-O-COL—Hardfacing welding rods and electrodes and automatic hardfacing wire. Mir-O-Col Alloy Co., Los Angeles, Calif.
MISCO METAL—Sheets, plates, bars, welding rod, castings. Michigan Steel Casting Co., Detroit, Mich.
MISSING LINK—High frequency arc stabilizer. Mid-States Welder Mfg. Co., Chicago, Ill.
MIXEND—Electrodes for welding cast iron. Arcos Corp., Philadelphia, Pa.
MOCOT—Finger cots. Wheeler Protective Apparel, Inc., Chicago, Ill.
MODERN FLOW—Work benches and lockers. Equipto, Aurora, Ill.
MODU WAVE—Welder. Sciaky Bros., Inc., Chicago, Ill.
MOGUL—Metal spraying equipment and metallizing wire. Metallizing Co. of America, Inc., Chicago, Ill.
MOLDISC—Sanding wheels. Raybestos Manhattan, Inc., Passaic, N. J.
MOGULOID—Impregnating sealant. Metalizing Co. of America, Chicago, Ill.
MOGULLIZER—Vacuum-pressure impregnating machines. Metallizing Co. of America, Chicago, Ill.
MOLEX—Coated arc welding electrode. Metal & Thermit Corp., Rahway, N. J.
MOLICU-DRYER—Gas dryers. C. I. Hayes, Inc., Cranston, R. I.
MOLYMANG — Manganese steel welding electrodes. Westinghouse Electric Corp., Pittsburgh, Pa.
MOLY-MANG — Hardfacing electrode. Mir-O-Col Alloy Co., Inc., Los Angeles, Calif.
MOLY-NICKEL CAST IRON—Cast iron rod. Steel Sales Corp., Chicago, Ill.
MOLY-RODS—MOLY H—Alloy cast iron rods and for hard surfacing rods. Chicago Hardware Foundry Co., No. Chicago, Ill.
MOLYSPRAY—Molybdenum wire for metal spraying. North American Philips Co., Inc., Lewiston, Maine
MO-MANG.—Welding rods and electrodes. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
MONARCH—Hose. Hewitt-Robins, Inc., Stamford, Conn.
MONARCH—Helmets and face shields, helmet and coverglass and lens. Fibre-Metal Products Co., Chester, Pa.
MONARCH—Cutting torch. Harris Calorific Co., Cleveland, Ohio
MONEL—Nickel copper corrosion resisting alloy. The International Nickel Co., Inc., New York, N. Y.
MONEL-CLAD STEEL—Bi-metal plate composed of a layer of solid Monel bonded to a heavier backing plate of steel. Lukens Steel Co., Coatesville, Pa.
MONELITE—Goggles. Dockson Corp., Detroit, Mich.
MONEND—Electrodes for welding Monel. Arcos Corp., Philadelphia, Pa.
MONEY-MAKER—Welding and cutting equipment. Modern Engineering Co., St. Louis, Mo.
MONITOR—Portable oxyacetylene cutting machine. The Linde Co., New York, N. Y.
MONITOR—Wire wheel brushes. The Osborn Mfg. Co., Cleveland, Ohio
MONITOR—Steel tape rule. Master Rule Mfg. Co., Middletown, N. Y.
MONO-BILT—Rotary wire wheel brush. The Milwaukee Brush Mfg. Co., Milwaukee, Wis.
MONOFRAX—Refractories. The Carborundum Co., Niagara Falls, N. Y.
MONO GOGGLE—Goggle. Willson Products, Inc., Reading, Pa.
MONOGRAPH — Oxyacetylene shape cutting machine. Air Reduction Sales Co., New York, N. Y.
MONOWELD—Contact welding electrode. All-State Welding Alloys Co., White Plains, N. Y.
MOR-AMP—Arc welder. Mor-Amp, Inc., Jackson, Mo.
MORAN'S—Belt couplings. Greene, Tweed & Co., North Wales, Pa.
MOREY—Fluxes, welding rods and electrodes. Morey Flux & Chemical Co., Wilmington, Del.
MORRISON—Grinding wheel guards. Morrison Products, Inc., Cleveland, Ohio
MORWELD—Welding rods, electrodes, welding accessories, etc. Morris Wheeler & Co., Inc., Philadelphia, Pa.
MOSLO—Equipment used in the manufacture of arc welding electrodes. Moslo Machinery Co., Celevand Ohio
MOULDOUGH—Backing up material. Metal Bond Mfg. Co., Montgomery City, Mo.
MULLFRAX—Refractories. The Carborundum Co., Niagara Falls, N. Y.
MULSINE—Metals and parts cleaner. Turco Products, Inc., Los Angeles, Calif.
MULSIREX—Metals and parts cleaner. Turco Products, Inc., Los Angeles, Calif.
MULTI-AMP—Transformers. Muti-Amp Corp., Union, N. J.
MULTI-FLAME—Torch head. Linde Co., New York, N. Y.
MULTI-FLEX—Carbon motor and generator brushes. Speer Carbon Co., St. Marys, Pa.
MULTIGUARD—Induction motors. Lincoln Electric Co., Cleveland, Ohio
MULTI-HYDROMATIC—Spot; projection; butt; flash; gun; seam; multiple spot welders; jigs and fixtures. Multi-Hydromatic Welding & Manufacturing Co., East Detroit, Mich.
MULTIMAC—Automatic universal rebuilder. Automatic Welding Co., Waukesha, Wis.
MULTI-PIC—Weld cleaning hammer and brushes. Bernard Welding Equipment Co., Chicago, Ill.
MULTIMET—Cast or wrought heat-resistant alloy. Haynes Stellite Co., Kokomo, Ind.
MULTI-SPEED—Multiple resistance welder. The Taylor-Winfield Corp., Warren, Ohio
MULTI-STAGE—Gas pressure reaulators. The Harris Calorific Co., Cleveland, Ohio.
MULTI-WELD—Circuit control panels. Westinghouse Electric Corp., Pittsburgh, Pa.
MULTIPLE UNIT—Heating elements. Hevi-Duty Electric Co., Milwaukee, Wis.
MUREX—Arc welding electrodes. Metal and Thermit Corp., Rahway, N. J.
MURINE—Eye drops. The Murine Co., Inc., Chicago, Ill.
MUSKETEER—Headgear for face shields. Jackson Products, Air Reduction Sales Co., Warren, Mich.

N

NCG—Welding and cutting equipment and compressed gas. National Cylinder Gas Div., Chicago, Ill.
NFA—Goggles. American Optical Co., Southbridge, Mass.
NMS—Tip cleaners. New Mexico Steel Co., Albuquerque, N. M.
N BOROLON—Grinding wheels. Simonds Abrasive Co., Philadelphia, Pa.
NALCO—Aluminum flux and soldering flux. National Lead Co., New York, N. Y.
NAGELDINGER—Regulators, valves, torches. John Nageldinger & Sons, Inc., Bronx, N. Y.
NAPOLITAN—Flux for welding sheet aluminum. Air Reduction Sales Co., New York, N. Y.
NARCAL—Fire brick. North American Refractories Co., Cleveland, Ohio
NARCHROME—Refractories. North American Refractories Co., Cleveland, Ohio
NASO—Goggles. American Optical Co., Southbridge, Mass.
NATIONAL—Cutting, soldering & welding tips. National Torch Tip Co., Pittsburgh, Pa.
NATIONAL—Electronic tubes. National Electronics, Inc., Geneva, Ill.
NATIONAL—Electric spot, seam, flash, butt and projection welding machines. National Electric Welding Machines Co., Bay City, Mich.
NATIONAL—Motor generator brushes, carbon blocks and paste, carbon electrodes and refractories. National Carbon Co., New York, N. Y.
NATIONAL—Calcium carbide and lights and lanterns. National Carbide Company, Div. of Air Reduction Co., Inc., New York, N. Y.
NATIONAL—Weld timer. National Time & Signal Corp., Detroit, Mich.
NATIONAL—Gas welding and flame-cutting torches, regulators including medical fittings, adapters, and accessories. National Welding Equipment Co., San Francisco, Calif.
NATIONAL-TIMER—Welding timer. National Time & Signal Corp., Detroit, Mich.
NAWSUCO—Weldors's leather clothing. National Welders Supply Co., Charlotte, N. C.
NELSON—Arc stud welder. Nelson Stud Welding Div. Gregory Industries, Inc., Lorain, Ohio
NELWELD—Stud welding equipment and flux-filled studs. Nelson Stud Welding Div., Gregory Industries, Inc., Lorain, Ohio
NELWELDER—Stud welding gun and power and battery units. Nelson Stud Welding Div., Gregory Industries, Inc., Lorain, Ohio
NEFCO—Weld filler, plastic iron, cast iron weld and brazing flux and aluminum flux. Northeast Metals, Co., Philadelphia, Pa.
NEOTROL—Electric controls, weld-timers. Electric Controller & Mfg. Co., Cleveland, Ohio
NEOTROL-COMPENSATING—Weld timer. Electric Controller & Manufacturing Co., Cleveland, Ohio
NEVER-CLOG—Furnace and boiler cleaning vacuum cleaners. Marvel Industries, Inc., Boston, Mass.
NEW ENGLAND—Acetylene, argon, hydrogen, oxygen, adapters, manifolds and flame hardening equipment. New England Gas Products, Inc., Charleston, Mass.
NEWFLEX—Rubber fatigue mat. Newth Rubber Co., Barrington, R. I.
NEW KATHODE—Mild steel, general purpose electrode. Lincoln Electric Co., Cleveland, Ohio
NEW WAY—Torch lighter. Matchless Utilities Co., New York, N. Y.
NI-AN-CO—Welding flux. Sierra Welding Flux Co., Temple City, Calif.
NI-CASTWELD—Nickel, cast iron, welding rod. Steel Sales Corp., Chicago, Ill.
NIAGARA—Automatic electronic welding machines. Niagara Machine & Tool Works, Buffalo, N. Y.
NIBCO—Welding fittings. Northern Indiana Brass Co. Elkhart, Ind.
NICASTOX—Nickel cast iron welding rod. Central Steel and Wire Co., Chicago, Ill.
NICHOLSON—Files. Nicholson File Co., Providence, R. I.
NICHROME—Nickel-chromium alloy welding rod. Driver-Harris Co., Harrison, N. J.
NICKALLOY—Nickel electrode for welding cast iron. McKay Co., Pittsburgh, Pa.
NICKEL—Nickel forms such as sheet, plate, strip, tubing, rod or wire. The International Nickel Co., New York, N. Y.
NICKEL-ARC—Electrodes for cast iron welding. Alloy Rods Co., York, Pa.
NICKEL-CLAD—Bi-metal plate composed of a layer of solid nickel bonded to a heavier backing plate of steel. Lukens Steel Co., Coatesville, Pa.
NICKELCAST—For welding cast iron, machinable, approx. 100 nickel. D-c or A-c. Hobart Bros. Co., Troy, Ohio
NICKELCHROMEWELD—Shielded arc electrode. Lincoln Electric Co., Cleveland, Ohio
NICKELEND—Electrodes for welding nickel. Arcos Corp., Philadelphia, Pa.
NICKELMANG—Welding electrode for welding manganese steels. Westinghouse Electric Corp., Pittsburgh, Pa.
NICKEL MANGANESE—Building up worn manganese-welding. Industrial Overlay Metals, Inc., Eaton, Ohio
NICKELOID METALS—Nickel plated steel. American Nickeloid Co., Peru, Ill.
NICKEL STEEL—Arc welding electrode. Metal & Thermit Corp., Rahway, N. J.

NICKEND—Electrodes for welding high carbon, low alloy high tensile and free machining steel. Arcos Corp., Philadelphia, Pa.
NICO—Electrode for machine weld on cast iron. American Arc Welders, Inc., Roseau, Minn.
NICOL-ROD—Nickel welding electrode. Marquette Manufacturing Co., Inc., Minneapolis, Minn.
NICROBRAZ—Stainless steel high temperature brazing alloy. Wall Colmonoy Co., Detroit, Mich.
NICUEND—Electrodes for welding cupro-nickel. Arcos Corp., Philadelphia, Pa.
NIKROMOX—Stainless steel flux. Canadian Liquid Air Co., Ltd., Montreal, Canada.
9000—Carbon arc torch. Mid-States Welder Mfg. Co., Chicago, Ill.
98M2—Cutting tools. Haynes Stellite Co., Kokomo, Ind.
NI-MANG—Manual hardfacing rods and electrodes. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
NI-REST—Cast iron welding rod. Chicago Hardware Foundry Co., North Chicago, Ill.
NI-ROD—Electrode for cast iron welding. International Nickel Co., Inc., New York, N. Y.
NITECTIC—Nickel electrode. Eutectic Welding Alloys Corp., Flushing, N. Y.
NIWELD—Cast iron welding rod. Crucible Steel Co. of America, Harrison, N. J.
NO-BLOW—Blast tips. Eclipse Fuel Engineering Co., Rockford, Ill.
NO-FOG—Liquid to prevent fogging, steaming and frosting of goggles and other glass surfaces. Also lens cleaning stations. Carhoff Co., Cleveland, Ohio
NO-SPAT—Spatter preventives. Midland Paint and Varnish Co., Cleveland, Ohio
NON-FLASH—Welding and cutting torches. National Cylinder Gas Div., Chicago, Ill.
NON-PIT—Plastic coated glass lenses for helmets, shields and goggles. Eastern Equipment Co., Willow Grove, Pa.
NONOX SWEDO—Low carbon welding rods. Central Steel and Wire Co., Chicago, Ill.
NOPAK—Cylinders and valves. Galland-Henning Mfg. Co., Milwaukee, Wis.
NON-SPATTER—Clear cover lens. Lincoln Electric Co., Cleveland, Ohio
NORBIDE—Sand blast nozzles. Norton Co., Worcester, Mass.
NORELCO—Contact welding electrode. North American Philips Co., Inc., Elmet Div., Lewiston, Maine.
NORGREN—Regulating and reducing valves, relief valves, needle valves and cocks, hose couplings and fittings and other pneumatic products. C. A. Norgren Co., Englewood, Colo.
NORRIS-THERMADOR—Acetylene cylinders. Norris-Thermador Corp., Los Angeles, Calif.
NORTON—Abrasives used in grinding wheels for grinding and finishing welds, etc. Norton Co., Worcester, Mass.
NORWELD—Copper coated wire or welding rod. Steel Sales Corp., Chicago, Ill.
NORWELD SPECIAL—Copper coated wire. Steel Sales Corp., Chicago, Ill.
NOT-A-SEAM—Welding gloves. Hanover Gloves Co., Hanover, Pa.
NO-TANGLE NOTCH COILS—Brazing rings. Lucas-Milhaupt Eng. Co., Cudahy, Wis.
NOVIWELD—Filter glass plates and lenses. American Optical Co., Southbridge, Mass.
NOVIWELD DIDYMIUM—Filter glass plates and lenses. American Optical Co., Southbridge, Mass.
NO. 6—Stainless steel flux. Farreloy Co., Philadelphia, Pa.
NO. 15 CHROME NICKEL—Stainless steel electrode. Metal & Thermit Corp., Rahway, N. J.
NO. 16 GH—Stainless steel welding flux. Victor Equipment Co., San Francisco, Calif.
NO. 22—Cast iron electrodes. Chicago Hardware Foundry Co., North Chicago, Ill.
NO. 42—Solvent cleaner. Metal cleaners. Wayne Chemical Products Co., Detroit, Mich.
NO. 459—Martensitic hard facing rod. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
NU-ARC—A-c welding equipment. Electric Arc Inc., Newark, N. J.
NU-BOND—Plastic fiberglass solder. Swiss Laboratory, Cleveland, Ohio
NU-BRAZE—Silver brazing alloy. American Silver Co., Inc., Flushing, N. Y.
NUSTEEL—For removal of heat tints in welding. Nu Steel Co., Chicago, Ill.
NU-TIP—Reconditioned resistance welding electrode. P. R. Mallory & Co., Inc., Indianapolis, Ind.
NU-TWIST—Die adaptor for resistance welder. P. R. Mallory & Co., Inc., Indianapolis, Ind.
NU-WRINKLE—Cap type resistance welding electrode. P. R. Mallory & Co., Inc., Indianapolis, Ind.
NYDRA-CUT—Power hack saws. Peerless Machine Co. Racine, Wis.
NYROGEN—Powder cutting gas. National Cylinder Gas Div., Chicago, Ill.

O

O-B—Rail bonds, electric arc welding machines, electrodes, electrode holders, helmets, face shields and accessories. Ohio Brass Co., Mansfield, Ohio
O.M.W.—Shape cutting machine. Ohmstede Machine Works, Beaumont, Texas
O-Z—Solderless lugs and connectors, heavy duty power connectors, corrosion resistant bolts, grounding fittings and welding terminal panels. O-Z Electrical Mfg. Co., Brooklyn, N. Y.
OAKITE—Spatter preventives and metal-cleaning compounds. Oakite Products, Inc., New York, N. Y.
OBALLOY—Signal bonds. Ohio Brass Co., Mansfield, Ohio
OCCO—Soldering flux. Ohio Carbon Co., Cleveland, Ohio
OCTOPUS—Welding fume exhauster. Chelsea Fan & Blower Co., Inc., Plainfield, N. J.
OCTOPUS JR.—Portable exhauster and blower. Chelsea Fan and Blower Co., Inc., Plainfield, N. J.
OHIO—Bolts, nuts, brackets and kindered fastening devices. The Ohio Nut & Bolt Co., Berea, Ohio
OHIO—Motor and generator brushes. Ohio Carbon Co., Cleveland, Ohio
OHIO M—Composition and wire wound resistors. Ohio Carbon Co., Cleveland, Ohio
OHMITE—Resistance coils, rheostats, switches and similar equipment. Ohmite Mfg. Co., Chicago, Ill.
OIC—Valves. The Ohio Injector Co., Wadsworth, Ohio
OKOCORD—Rubber-sheathed portable cable for electrical welding equipment. The Okonite Co., Passaic, N. J.
OKONITE—Rubber splicing tape. The Okonite Co., Passaic, N. J.
OLD FORGE—Chisels, pneumatic and hand; punches; hand tools and tool handles. Quality Tools Corp., New Wilmington, Pa.
OLD HICKORY—Weldor's protective clothing. Industrial Gloves Co., Danville, Ill.
OMICRON—Steel tape beam compasses for layout work. The Omicron Co., Glendale, Calif.
I-4-U—Salt tablet dispenser. Mine Safety Appliances Co., Pittsburgh, Pa.
ONE LINE—Welding hose. Eastern Equipment Co., Willow Grove, Pa.
ON GUARD—Protected regulators for all compressed gases. K-G Equipment Co., Inc. Allentown, Pa.
"130-X" MONEL—Electrode for welding monel International Nickel Co., Inc., New York, N. Y.
"131" NICKEL ELECTRODE—General purpose electrode for metal arc welding of nickel and low carbon nickel. International Nickel Co., Inc New York, N. Y.
"132" INCONEL ELECTRODE—A general purpose electrode for metal arc welding of inconel (nickel-chromium alloy), joining inconel to steel or stainless steel. International Nickel Co., Inc New York N. Y.
"134" K MONEL—Electrode for welding "K" monel. International Nickel Co., Inc., New York, N. Y.
"140" MONEL—Electrode for welding monel to steel. International Nickel Co., Inc., New York, N. Y.
OPTILITE—Resin lens material. U. S. Safety Service Co., Kansas City, Mo.
OPTIMUS—Pre-cleaner and deoxidizer. Optimus Equipment Co., Matawan, N. J.
ORANGE-STRIPE—Garnet papers and cloths. Clover Manufacturing Co., Norwalk, Conn.
ORTHO-WELD—Bausch & Lomb Optical Co., Rochester, N. Y.
OSAGE—Hardfacing rods. Osage Metal Co., Oklahoma City, Okla.
OSBORN—Industrial brushes suitable for weld cleaning operations. Osborn Mfg. Co., Cleveland, Ohio
OVAL CAP—Torch lighter and flints. Flint Products Co., Brooklyn, N. Y.
OWEN—Induction type arc welder. Owen Electric Co., Fayetteville, N. C.
OXALUMA—Grinding wheels and abrasive products. Cortland Grinding Wheels Corp., Chester, Mass.
OXCO—Oxygen and acetylene gases compressed in cylinders. Oklahoma Oxygen Co., Oklahoma City, Okla.
OXO—Oxygen, acetylene, propane and other gas regulators, protective lens and welding goggles, and inert-gas controls. Oxo Welding Equipment Co., New Lenox, Ill.
OXOMATIC—Electronic welding controls. Oxo Welding Equipment Co., New Lenox, Ill.
OXWELD—Welding, cutting and metal-treating apparatus, welding rods and supplies. Linde Company, New York, N. Y.
OXWELD MP-11—Acetylene generator. Linde Co., New York, N. Y.
OXYARC—Holder for arc oxygen cutting rod. Arcos Corp., Philadelphia, Pa.
OXYCUTTEND—Arc-oxygen cutting electrodes. Arcos Corp., Philadelphia, Pa.
OXYGRAPH—Oxyacetylene cutting machine. The Air Reduction Sales Co., New York, N. Y.
OXYSTAIN—Welding flux. Sierra Welding Flux Co., Temple City, Calif.
OXWELD MP-11—Acetylene generator. Linde Co., New York, N. Y.

P

PBEX—High strength electrode. Perma-Latem Welding Alloys Inc., Red Bank, N. J.
PF—Mild steel a-c, d-c electrode. Harnischfeger Corp., Milwaukee, Wis.
PF—Center finder. Interstate Sales Co., New York, N. Y.
PG—Polishing, grinding wheels. Minnesota Mining & Mfg. Co., St. Paul, Minn.
P&H—Welders, electrodes, welding positioners and hoists, etc. Harnischfeger Corp., Milwaukee, Wis.
P-H—Welding cables. Progressive Welder Company, Detroit, Mich.
PM-I—Induction heating equipment. Marion Electrical Instrument Co., Manchester, N. H.
PWC—Arc welding, resistance welding and power cables. The Plastic Wire & Cable Corp., Jewitt City, Conn.
PACKLESS—Air control valves. Hannifin Corp., Des Plaines, Ill.
PACIFIC—Welding electrodes. Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
PACIFIC—Calcium carbide. Pacific Carbide & Alloys Co., Portland, Ore.
PACIFIC—Spot-welding electrodes. Smith Bros., & Hughes, San Diego, Calif.
PACO—Oxygen and acetylene. Pacific Acetylene Co., San Diego, Calif.
PADDLE HOLDER—Resistance welding electrode holder. P. R. Mallory & Co., Inc., Indianapolis, Ind.
PAGE—Inert-gas, submerged-arc and oxyacetylene welding wires. Page Steel and Wire Div., American Chain and Cable Co., Inc., Monessen, Pa.
PAINTMARK—Metal marking crayons. The American Crayon Co., Sandusky, Ohio.
PAK-KUT—Portable cutting outfit. National Welding Equipment Co., San Francisco, Calif.
PAL—Valves for hand, solenoid and cam operation. Ross Operating Valve Co., Detroit, Mich.
PAL-WELD—Tinning and soldering fluxes and compounds, solders, soldering equipment, etc. Pal-Weld Mfg. Co., Seattle, Wash.
PALCO—Mechanical packing. Greene, Tweed & Co., New Wales, Pa.
PALMGREN—Rapid cable connectors, underwater cutting torches and electrode holders, weld gauges, drill press machinist and hand vises and hose clamps and tools. Chicago Tool and Engineering Co., Chicago, Ill.
PALMER-SHILE—Cylinder truck. Palmer-Shile Co., Detroit, Mich.
PANCAKE—Compact hand valve. Ross Operating Valve Co., Detroit, Mich.
PANDUX—Temperature measuring equipment, x-ray and radium protection, hardness testing equipment and pyrometers. Pacific Transducer Corp., Los Angeles, Calif.
PANORAM—All-plastic chippers goggle. American Optical Co., Southbridge, Mass.
PARKER-KALON—Drive-screw, also welding studs. Parker-Kalon Corp., Clifton, N. J.
PATROL—Air and gas fitters. The Patrol Valve Co., Cleveland, Ohio
PAVCO—Rebreather bags for oxygen masks and industrial x-ray film. Paul Varkell Co., New York, N. Y.
PEARLITE—Carburizer. E. F. Houghton & Co., Philadelphia, Pa.
PEARLITIC—Iron welding rods. Morey Flux & Chemical Co., Wilmington, Del.
PECK—Automatic welding equipment. Cecil C. Peck Co., Cleveland, Ohio
PEEL-QUICK—Weld tester. Industrial Welding Services, Louisville, Ky.
PEER—Resistance-welding equipment. Peer, Inc., Benton Harbor, Mich.
PELOX—Metal cleaners, polishers, rust preventives and removers, cylinder trucks. Pacific Hardware & Steel Co., Inc., San Jose, Calif.
PELRO—Mechanical packing. Greene, Tweed & Co., North Wales, Pa.
PENN—Bronze welding rods. Titan Metal Mfg. Co., Bellefonte, Pa.
PENN BRONZE—Deoxidized bronze welding rods. Titan Metal Mfg. Co., Bellefonte, Pa.
PENNSALT—Metal cleaners. Pennsalt Chemicals Corp., Philadelphia, Pa.
PENNYPINCHER—Bench vises. Columbian Vise & Mfg. Co., Cleveland, Ohio
PEP-UP—Salt tablets. United States Safety Service Co., Kansas City, Mo.
PERFECT WELDER—Leather welding gloves. E. J. Streichert, Chicago, Ill.
PERFECTION—Welding ground clamp. Tweco Products, Inc., Wichita, Kan.
PERFECTION—Bar clamp. Cincinnati Tool Co., Cincinnati, Ohio
PERLITON—Liquid carburizer. E. F. Houhgton & Co., Philadelphia, Pa.
PERMACLAD—Stainless clad sheet steel. Jessop Steel Co., Washington, Pa.
PERMA CLEAR—Cover lenses. Chicago Eye Shield Co., Chicago, Ill.
PERMA-FLUX—Fluxes. Permalatem Welding Alloys, Inc., Red Bank, N. J.
PERMA-LIN—Waterless hand cleanser. Permalatem Welding Alloys, Inc., Red Bank, N. J.
PERMA-LATEM—Gas and arc welding rods, electrodes and fluxes. Permalatem Welding Alloys Inc., Red Bank, N. J.
PERMA-LOY—Gas welding rods. Permalatem Welding Alloys, Inc., Red Bank, N. J.
PERMA-SIL—Silver alloys. Permalatem Welding Alloys, Inc., Red Bank, N. J.
PERMA-TIN—Paste solder. Permalatem Welding Alloys, Inc., Red Bank, N. J.
PERSORB—Sweat band. Mine Safety Appliance Co., Pittsburgh, Pa.
PETERSON—Preheating torches, surface grinders and welding fluxes. Peterson Welding Laboratories, Kansas City, Mo.
PETERSON—Fluxes. Peterson Machine Tool, Inc., Merriam, Kan.
PHILIPS—Electrodes for arc welding cast iron. C. E. Philips & Co., Detroit, Mich.
PHOS-BRONZE—All-position electrode. Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.
PHOS-COPPER—Copper alloy. Westinghouse Electric Corp., Pittsburgh, Pa.
PHOSCO—Low temperature brazing alloy. United Wire & Supply Corp., Providence, R. I.

PHOSPHORUS BRONZE 310 and 903—Welding rods. American Brass Co., Waterbury, Conn.
PHO-SON—Low temperature brazing alloy. United Wire & Supply Corp., Providence, R. I.
PHOS-SILVER—Brazing alloys. Westinghouse Electric Corp., Pittsburgh, Pa.
PHOS-TRODE—Phosphor bronze electrode. Ampco Metal, Inc., Milwaukee, Wis.
PHOSTUBE—Phosphor-copper brazing alloys. All-State Welding Alloys Co., Inc., White Plains, N. Y.
PHOTOSWITCH—Electronic timers, controls, and relays. Photoswitch, Inc., Cambridge, Mass.
PHOTOVOLT—Electric timer. Photovolt Corp., New York, N. Y.
PICKER—X-ray and other radiographic equipment. Picker X-ray Corp., White Plains, N. Y.
PIERCE—Governor for controlling the speeds of gasoline driven electric welders. Pierce Governor Co., Inc., Anderson, Ind.
PIPELINER—Welder designed for oil field use. Hobart Bros. Co., Troy, Ohio
PIPETITE-STIK—Pipe joint compound in stick form. Lake Chemical Co., Chicago, Ill.
PITTSBURGH—Valves for oxygen, hydrogen, carbon dioxide, and other high pressure cylinders. Kerotest Manufacturing Co., Pittsburgh, Pa.
PLANEWELD—Mild steel electrode. Lincoln Electric Co., Cleveland, Ohio
PLANOGRAPH—Oxyacetylene cutting machine. Air Reduction Sales Co., New York, N. Y.
PLASTI-GOGGLE—Weldor's and industrial worker's goggle. Eastern Equipment Co., Willow Grove, Pa
PLAS-TOUGH—Plastic goggle lenses. Willson Products, Inc., Reading, Pa.
PLATE-MATE—Line of arc-welding electrodes. Lukens Steel Co., Coatesville, Pa.
PLUMBER KRAK-STIK—Sealing cement in stick form. Lake Chemical Co., Chicago, Ill.
PLURALLOY—Low-hydrogen electrode. McKay Co., Pittsburgh, Pa.
PLURAMELT—Stainless clad steel. Allegheny Ludlum Steel Corp., Brackenridge, Pa.
PLY—Protective skin creams. Milburn Co., Detroit Mich.
PLYKLEENER—Hand cleaner. Milburn Co., Detroit, Mich.
PNEUMATRACTOR—Tractor compressor. Schramm, Inc., West Chester, Pa.
POLYGRAPH—Oxyacetylene cutting machine. Air Reduction Sales Company, New York, N. Y.
POLY-KOTE—Rust preventive. Kelite Products, Inc., Los Angeles, Calif.
PONY—Steel bar clamp, "C" clamps, clamp fixtures, etc. Adjustable Clamp Co., Chicago, Ill.
POPULAR—Welding torch gas lighters. Safety Gas Lighter Co., Lynn, Mass.
POR-OS-WAY—Plastic grinding wheels. A. P. DeSanno & Son, Inc., Phoenixville, Pa.
PORT-A-BELT—Belt grinding attachment. Carborundum Co., Niagara Falls, N. Y.
PORTAIR—Blowers. Coppus Engineering Corp., Worcester, Mass.
PORTELEVATOR—Portable elevating tables. The Hamilton Tool Co., Hamilton, Ohio
PORTO-ARC—Gas-driven, a-c welder and power plant. Marquette Mfg. Co., Minneapolis, Minn.
PORTOMAG—Magnetic plate clamp. Portomag, Inc., Ferndale, Mich.
PORTO POWER—Pipe and conduit benders and pullers (wheel and gear). Blackhawk Mfg. Co., Milwaukee, Wis.
PORTO-SCREEN—Portable welding screen. Frommelt Industries, Dubuque, Iowa
PORTO-SHEAR—Portable electric shears. The Black & Decker Mfg. Co., Towson, Md.
PORTOVENT—Ventilating hose. American Ventilating Hose Co., New York, N. Y.
POSITIVE ARC—A-c arc welder and inert-arc welder. Welding Apparatus Co., Chicago, Ill.
POWER CUT—Coolant. The Do All Co., Des Plaines, Ill.
POWER-DOME—Air cylinders. The Bellows Co., Akron, Ohio
POWERON—Nozzles. American-La France Corp., Elmira, N. Y.
POWER-TWIN—Hydraulic pullers. Owatonna Tool Co., Owatonna, Minn.
POWDER WELD—Alloys, powder welding, silver brazing, blow pipes brazing, brazing alloys and brazing outfits, gas machines, brazing gas, metal spraying equipment, nozzles, torch, powder welding torches, soldering outfits, tips, soldering tips, welding gas torches, brazing torches, welding gas welders, inert gas welders, projection welding apparatus. The Powder Weld Process Co., Brooklyn, N. Y.
POWERHOUSE—Electric arc welder. Precision Welder Mfg. Co., Chicago, Ill.
POWER-PLUS—Combination a-c welder. Permalatem Welding Alloys, Inc., Red Bank, N. J.
POWRARM—Welding positioners. Wilton Tool Manufacturing Co., Chicago, Ill.
POWROMATIC—Constant-voltage welder and controls for automatic welding. Hobart Bros. Co., Troy, Ohio
PRATT & CADY—Bronze and iron valves. R-P & C Valve Div. of American Chain & Cable Co., Inc., Reading, Pa.
PRECISION—Grinding wheels. Precision Grinding Wheel Co., Inc., Philadelphia, Pa.
PRECISION—Resistance welding machines. Precision Welder and Flexopress Corp., Cincinnati, Ohio
PRECISION—A-c arc welders. Precision Welder Mfg. Co., Chicago, Ill.
PRECISION PROFILE—Machinist's vise. Belmont Abrasives. Boston, Mass.
PRE-FOS—Rust preventives and removers. Wyandotte Chemical Corp., Wyandotte, Mich.
PREMIER—Welding and cutting outfits. Burdett Oxygen Co., Cleveland, Ohio
PREMIER—Welding wire. American Steel & Wire Co., Cleveland, Ohio
PREMIUM—Resistance welding electrode holder. P. R. Mallory & Co., Inc., Indianapolis, Ind.
PRESSURE BREAKER—Attachment for single-stage regulator to convert it into a 2-stage type. K-G Equipment Co., Inc., New York, N. Y.
PRESTO—Welding helmet shield. Sellstrom Manufacturing Co., Palatine, Ill.
PREST-O-LITE—Acetylene, air-acetylene equip., cylinders. Linde Co., New York, N. Y.
PREST-O-WELD—Welding, cutting and metal-treating apparatus. Linde Co., New York, N. Y.
PRESS-RITE—Power presses. Sales Service Machine Tool Co., St. Paul, Minn.
PRESSTITE—Spotweld sealers. Presstite Engineering Co., St. Louis, Mo.
PRESSTITE No. 261—Weld thru sealer. Presstite Engineering Co., St. Louis, Mo.
PROCESSED—Mild steel electrode. Champion Rivet Co., Cleveland, Ohio.
PROCESS K—Metal cleaner. Kelite Products, Inc., Los Angeles, Calif.
PROCESS K-1-8—Metal cleaner. Kelite Products, Inc., Los Angeles, Calif.
PRODUCTER—Positioner. Bentley Weldery, Inc., Syracuse, N. Y.
PROPELLAIR—Exhaust fans. Robbins & Myers, Inc., Springfield, Ohio
PRO-CLAMP—Positioning and aligning clamps. Bernard Welding Equipment Co., Chicago, Ill.
PROGRESSIVE—Seam, flash-butt, projection pedestal, rocker-arm, multi-spot and portable gun welders, hydraulic punching units, jigs and fixtures. Progressive Welder Sales Co., Pontiac, Mich.
PROTECTED ARC—Electrodes. National Cylinder Gas Div., Chicago, Ill.
PROTECTIVE COAT—Liquid preparation which prevents weld spatter adhesion. National Cylinder Gas Div., Chicago, Ill.
PROTECTO SHIELD—Face shield. Willson Products, Inc., Reading, Pa.
PROTECTOGLO—Combustion safeguard equipment. Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.
PRO-TECTO-CAPE—Welder's chrome leather safety clothing. Eastern Equipment Co., Willow Grove, Pa.
PROTECT-O-METAL—Spatter proofing compounds. G. W. Smith & Sons, Dayton, Ohio
PROTECTOR—Germicidal lamp units. C-B Tool Co., Lancaster, Pa.
PROTECT-O-VANE—Pyrometers. Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.
PRO-TEK—Protective cream. E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.
PROTEX—Rust preventives. Wayne Chemical Products Co., Detroit, Mich.
PROXY—Propane and natural gas cutting tips. Universal Cutting & Welding Equipment Mfg. Co., Ft. Lauderdale, Fla.
PUL-LIFT—Ratchet lever hoist. The Yale & Towne Mfg. Co., Philadelphia, Pa.
PULLMAN—Abrasive discs, floor polishing and scrubbing machines, and commercial vacuum cleaners. Marvel Industries, Inc., Boston, Mass.
PULLMAX—Nibbling machines and metal cutting shears. American Pullmax Co., Inc., Chicago, Ill.
PULMOSAN—Respirators, shield-respirators, welding helmets, goggles, welder's gloves, eyeshields, acid-handling equipment, and protective clothing. Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
PUR-A-WELD—Gas masks for welding. Acme Protection Equipment Co., South Haven, Mich.
PURE—Block and paste carbon and carbon electrodes. Pure Carbon Co., Inc., St. Marys, Pa.
PURETUNG—Tungsten welding electrodes. Tungsten & Chem. Div. of Sylvania Elec. Prod., Inc., Towanda, Pa.
PURITAN—Oxygen, hydrogen, acetylene, gases, electric welders, acetylene generators, welding and cutting equipment, welding rods, electrodes, fluxes, pre-heating outfits, pressure gauges. Puritan Compressed Gas Corp., Kansas City, Mo.
PURITAN PM-20—Oxygen masks. Puritan Compressed Gas Corp., Kansas City, Mo.
PURITE—Cast tungsten carbide products. Electrodes, inserts, sand blast nozzles and welding rods and surfacing-hardening powder. Purnell Alloy Co., Angleton, Texas.
PURITY—Flux. Purity Cylinder Gases, Inc., Grand Rapids, Mich.
PUR-METL—Flux or bronze welding cast iron. Pratt-Brayman Mfg. Co., Oscoda, Mich.
PUROX—Welding, cutting and metal-treating apparatus, liquid gas and vacuum containers. Linde Co., New York, N. Y.
PYLET—Electric and safety switches. The Pyle-National Co., Chicago, Ill.
PYRAMID—Babbitt metals. Magnolia Metal Co., Elizabeth, N. J.
PYRENE—Tire chains, self-closing repair links, emergency chains and chain tighteners. Pyrene Manufacturing Co., Newark, N. J.
PYRENE—Fire extinguishers. Pyrene Manufacturing Co., Newark, N. J.
PYREX—Heat resisting glasses. Corning Glass Works Corning, N. Y.
PYRO—Welding torch gas lighter. Safety Gas Lighter Co., Lynn, Mass.
PYROFAX—Hydrocarbon fuel gas. Linde Co., New York, N. Y.
PYROLENE—Propane. Burdett Oxygen Co., Cleveland, Ohio
PYROLUTE—Spatter preventive. Krembs & Co., Chicago, Ill.
PYROMARK—High temperature paint. Tempil Corp., New York, N. Y.
PYROMASTER—Indicating and recording Pyrometer. The Bristol Co., Waterbury, Conn.
PYROTONE—Ceramic backing ring. General Ceramics Corp., Keasbey, N. J.
PYR-O-VANE—Pyrometers. Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.

Q

QUAKER—Welding and sand blast hose. Quaker Rubber Co., Philadelphia, Pa.
QUELARC—Plugs and receptacles and cable connectors. Pyle-National Co., Chicago, Ill.
QUAKEROID—Fibre sheet. Quaker Rubber Corp., Philadelphia, Pa.
QUICK-AID FIREGUARD—Fire extinguishers. The General Detroit Corp., Detroit, Mich.
QUICK LOCKCET—"C" Clamps. Grand Specialties Co., Chicago, Ill.
QUICK-LOK—Joint for attaching welding helmet shells to safety caps. The Fibre Metal Products Co., Chester, Pa.
QUICK-AS-WINK—Air and hydraulic control valves and couplings. C. B. Hunt & Sons, Inc., Salem, Ohio
QUICKCET—Bar clamp. Grand Specialties Co., Chicago, Ill.
QUICK-DISCONNECT—Electrode holder. Cam-Lok Div., Empire Products, Inc., Cincinnati, Ohio
QUICK-WEDGE—Screw-holding screw drivers. Kedman Co., Salt Lake City, Utah
QUICKWORK—Rotary shear. Whiting Corp., Harvey, Ill.
QUICK-TRIK—Cable connectors. Jackson Products, Warren, Mich.
QUIK-LIFT—Electric hoist. Coffing Hoist Co., Danville, Ill.
QUIKCET—Clamps & vises. Grand Specialties Co., Chicago, Ill.
QUIK-TRIK—Cable connector. Jackson Products, Air Reduction Sales Co., Warren, Mich.

R

R-2—Rust preventives and removers. Wyandotte Chemical Corp., Wyandotte, Mich.
RB—Shear weld trimmer. Morton Mfg. Co., Muskegon Heights, Mich.
RFC—Induction heaters. Radio Frequency Co., Inc., Medfield, Mass.
RLM STREAM FLO 40—Inspection equipment, fluorescent ltg. Benjamin Electric Mfg. Co., Des Plaines, Ill.
RLM SHIELD-FLO 40—Inspecting equipment, fluorescent ltg. Benjamin Electric Mfg. Co., Des Plaines, Ill.
RLM STREAM-FLO 100—Inspection equipment, fluorescent ltg. Benjamin Electric Mfg. Co., Des Plaines, Ill.
RLM TX-40—Inspection equipment, fluorescent ltg. Benjamin Electric Mfg. Co., Des Plaines, Ill.
R-M—Asbestos, products and rubber products. Raybestos-Manhattan, Inc., Passaic, N. J.
R MONEL—High-carbon Monel. The International Nickel Co., Inc., New York, N. Y.
RU—Sodium silicate. Philadelphia Quartz Co., Philadelphia, Pa.
RABIN—Weldors' gloves. Rabin Glove Co., Jersey City, N. J.
RACINE—Hydraulic pumps, pressure boosters and valve. Racine Tool & Machine Co., Racine, Wis.
RACALLOY—Stainless-steel welding wire and electrodes. Reid-Avery Co., Inc., Baltimore, Md.
RACO—Automatic welding equipment and mild-steel electrodes and welding wire. Reid-Avery Co., Baltimore, Md.
RADIAC—Grinding wheels and abrasive cutoff machines. A. P. DeSanno & Sons, Inc., Phoenixville, Pa.
RADIAGRAPH—Portable, motor driven, oxy-acetylene cutting machine. Air Reduction Sales Co., New York, N. Y.
RADIANT SPATTERPROOF—Welding lamp. Radiant Lamp Corp., Newark, N. J.
RADIUS MARKERS—For marking circles. Contour Marker Corp., Compton, Calif.
RAILENDER—Hardfacing electrode. The Champion Rivet Co., Cleveland, Ohio
RAILFACE—Welding rods and electrodes. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
RAILWEAR—Heavily coated electrodes. National Cylinder Gas Div., Chicago, Ill.
RAM ASSEMBLY—Hydraulic and air ram assemblies. Studebaker Machine Co., Maywood, Ill.
RAMET—Carbide. Vascoloy-Ramet Corp., Waukegan, Ill.
RANDALL—Soap stone holder, tip cleaner and electrode holder. Randall Manufacturing Co., North Kansas City, Mo.
RANGER—A-c arc welder. Larkin Welder & Machine Corp., Brooklyn, N. Y.
RANITE—Hardfacing welding electrodes and rods. Rankin Mfg. Co., Alhambra, Calif.
RANTUNG—Mild steel tube with tungsten carbide filler. Rankin Mfg. Co., Alhambra, Calif.
RAP-AROUND—Pipe-cutting template. R. E. Lee, Long Beach, Calif.
RAY-BAN—Glare protection lens. Bausch & Lomb Optical Co., Rochester, N. Y.

RAY-FOIL—Protective heat cloth. Frommelt Industries, Dubuque, Iowa
RAY-TEX—Vinyl coated fabric, resistant to radiant heat. Frommelt Industries, Dubuque, Iowa
RAYTHEON—Electronic tubes for use in welding controls, miniature spot welders. Raytheon Mfg. Co., Waltham, Mass.
READY-FLOW—Silver brazing alloy. American Platinum & Silver Div., Newark, N. J.
RE-BIT—Replaceable chisels for chipping hammers. Atlas Welding Accessories, Inc., Ferndale, Mich.
RECAP—Replaceable insert, spotwelding tip. Ampco Metal, Inc., Milwaukee, Wis.
RECIPROTROL—Automatic reciprocating air control valve. Gallard-Henning Mfg. Co., Milwaukee, Wis.
RECK-RACK—Welding positioner. Blackhawk Mfg. Co., Milwaukee, Wis.
RED CAP GASES—Oxygen-nitrogen (liquid and gaseous). Wolverine Gas Products, Inc., Saginaw, Mich.
RED COAT—Coated abrasives. Michigan Abrasive Co., Detroit, Mich.
RED DEVIL—Mild steel electrodes. The Champion Rivet Co., Cleveland, Ohio
RED DIAMOND—Oxygen, acetylene, hydrogen and welding-grade carbon dioxide. The Liquid Carbonic Div., General Dynamics Corp., Chicago, Ill.
REDDY—Grinder. The United States Electrical Tool Co., Cincinnati, Ohio
RED END—Folding wood rules. The Lufkin Rule Co., Saginaw, Mich.
RED HEAD—Welding and lifting "C" clamps. Chicago Boiler Co., Chicago, Ill.
RED HEAD—Acetylene generators, low pressure. Harris Calorific Co., Cleveland, Ohio
RED-ARROW—Vises. Columbian Vise & Mfg. Co., Cleveland, Ohio
REDI-ARC—A-c welder. Marquette Mfg. Co., Inc., Minneapolis, Minn.
REDI-FLUXED—Bronze welding rod. National Cylinder Gas Div., Chicago, Ill.
REDI-GLO MARK II—Fire extinguisher. Stop-Fire, Inc., Monmouth Junction, N. J.
REDI-MIX—Powdered solder and flux. Anchor Metal Co., Brooklyn, N. Y.
RED-ROD—Steel welding electrodes. Marquette Manufacturing Co., Inc., Minneapolis, Minn.
RED SEAL—Flannel gauntlet. Boss Mfg. Co., Kewanee, Ill.
RED STREAK—Circular metal saws. Simonds Saw & Steel Co., Philadelphia, Pa.
RED STRIPE—Emery cloth. Clover Manufacturing Co., Norwalk, Conn.
RED TANG—Files. Simonds Saw & Steel Co., Fitchburg, Mass.
REED—Vises. Reed Manufacturing Co., Erie, Pa.
REED—Automatic welding fixtures, turning rolls, etc. Webb Corp., Webb City, Mo.
REEVES FIRE-CHIEF—Welding curtains. A. Smith and Son, Inc., Philadelphia, Pa.
REFLECTOGAGE—Ultrasonic thickness gage. Sperry Products, Inc., Danbury, Conn.
RE-FLECTO-RAY—Lenses. Chicago Eye Shield Co., Chicago, Ill.
REFLECTOSCOPE—Ultrasonic flaw detector. Sperry-Rand Corp., Danbury, Conn.
REFORMED—Covered steel electrode. Arcos Corp., Philadelphia, Pa.
REFRAX—Refractories, bricks and special shapes. The Carborundum Co., Niagara Falls, N. Y.
REGO—Oxygen, acetylene, hydrogen manifolds and regulators, air regulators, medical oxygen therapy regulators, cylinder valves and gas welding and cutting apparatus. The Bastian Blessing Co., Chicago, Ill.
REGO GX—Welding torch. National Cylinder Gas Div., Chicago, Ill.
REHEAT—Asbestos sheet. Quaker Rubber Corp., Philadelphia, Pa.
REINER—Portable acetylene generator. Reiner and Campbell Co., Inc., Newark, N. J.
RELIATRON TUBES—Electronic tubes. Westinghouse Electric Corp., Pittsburgh, Pa.
RELIA-WELD—Flash welders. Swift Electric Welder Co., Detroit, Mich.
RELTOOL—Cutting tools. Reltool Corp., Milwaukee, Wis
REMOTROL—Remote controlled hydraulic jacks and pullers. Templeton, Kenly & Co., Broadview, Ill.
REMOVENE—Metal cleaner and rust preventive and remover. Krembs & Co., Chicago, Ill.
RENFROE—Steel lifting clamps. J. C. Renfroe & Sons, Inc., Jacksonville, Fla.
REP—Fluxes, soldering. Puritan Compressed Gas Co., Kansas City, Mo.
REPEATER-BRUSH—Weld cleaning hammer. Bernard Welding Equipment Co., Chicago, Ill.
REPUBLIC—Sand blast, steam, dual line welding and ventilating hose and rubber mallets. Republic Rubber Div., Lee Rubber & Tire Corp., Youngstown, Ohio
REPUBLIC—Steel and electric welded pipes, casing, tubing, etc. Republic Steel Corp., Cleveland, Ohio
REPUBLIC DOUBLE STRENGTH—Copper nickel molybdenum high tensile steel. Republic Steel Corp., Cleveland, Ohio
RESBOND—Coated abrasive. Clover Manufacturing Co. Norwalk, Conn.
RESILITE—Resin bond abrasive. Armour & Co., Alliance, Ohio
RESINAL—Cloth belts. Behr-Manning Corp., Troy, N. Y.
RESISTO-LOY—Hardfacing metal. Resisto-Loy Co., Grand Rapids Mich.
RESOTRON—Mobile x-ray units. General Electric Co., X-Ray Dept., Milwaukee, Wis.
REVERE BRAZING METAL—Brazing metal. Revere Copper and Brass, Inc., New York, N. Y.
REVERE 456—Bronze welding rod. Revere Copper and Brass, Inc., New York, N. Y.
REVERE MANGANESE BRONZE—Bronze welding rods. Revere Copper and Brass, Inc., New York, N. Y.
REVERE PHOSPHOR BRONZE—Tin bronze welding rods. Revere Copper and Brass, Inc., New York, N. Y.
REVERE PHOSPHOR DEOXIDIZED COPPER—Phosphor deoxidized copper welding rods. Revere Copper and Brass, Inc., New York, N. Y.
REVERE SILICON DEOXIDIZED COPPER—Silicon deoxidized copper. Revere Copper and Brass, Inc., New York, N. Y.
REVERS-O-CHARGE—Welding control equipment. Weltronic Co., Detroit, Mich.
REVOLVATOR—Hand and electric trucks, portable and freight elevators and turntables. Revolvator Co., North Bergen, N. J.
REX-AIRATE—Fans and blowers. Air Controls, Inc., Cleveland, Ohio
REX TUBE—Brass & steel tubing & ventilating tubing. Flexonics Corp., Maywood, Ill.
REX WELD—Steam hose. Flexonics Corp., Maywood, Ill.
REXARC—Hardfacing and manganese electrodes, and automatic welders and positioners. Sight Feed Generator Co., West Alexandria, Ohio
REXWELD—Hardfacing electrodes. Crucible Steel Co. of America, Harrison, N. J.
REYNOLDS—Aluminum and aluminum alloys. Reynolds Metal Co., Louisville, Ky.
REZ-SIZE—Abrasives. Clover Mfg. Co., Norwalk, Conn.
REZISTAL—Stainless-steel electrodes. Crucible Steel Co. of America, Harrison, N. J.
REZISTAN—Cast-iron alloys. Uniworld Research Corp. of America, Cleveland, Ohio
RIDGID—Pipe wrenches, cutters, vises, power drives, and machines. The Ridge Tool Co., Elyria, Ohio
RIDGOIL—Cutting and threading oil. The Ridge Tool Co., Elyria, Ohio
RIEGEL—Weldors' gloves. Riegel Textile Corp., Conover, N. C.
RIEHLE—Machines for testing of materials. Riehle Testing Machine Div., American Machine & Metals, Inc., E. Moline, Ill.
RIGGER—Cutting torches for acetylene propane and natural gas. Universal Cutting & Welding Equipment Mfg. Co., Inc., Fort Lauderdale, Fla.
RIMGUARD—Weld screws. Parker-Kalon Div., General American Transportation Corp., Clifton, N. J.
RIVERSIDE—Phosphor bronze alloys, uncoated welding rods. Riverside Metal Co., Riverside, Burlington Co., N. J.
RIVWELD—Stud welder fastener. Nelson Stud Welding Div., Gregory Industries, Inc., Lorain Ohio
ROBOTECTOR—Electronic water saver. Robotron, Inc., Detroit, Mich.
ROBOTRON—Industrial electronic weld timers. Robotron, Inc., Detroit, Mich.
ROBVON—Weld back-up rings. Robvon Backing Ring Co., Elizabeth, N. J.
ROCKET—Iron-powder electrodes. Hobart Bros. Co., Troy, Ohio
ROCKET-ROD—Mild steel coated electrode a-c or d-c. Hobart Bros. Co., Troy, Ohio
ROCKWELL—Hardness testers. Wilson Mechanical Instrument Co., New York, N. Y.
ROD-HOD—Electrode container. Marquette Mfg. Co., Inc., Minneapolis, Minn.
ROD-PAK—Rod packages. Marquette Manufacturing Co., Inc., Minneapolis, Minn.
ROD SAVER—Electrode holders. Martin Wells, Inc., Los Angeles, Calif.
RODEO—Safety glasses. Bausch & Lomb Optical Co., Rochester, N. Y.
ROEBLING—Welding wire and cables. John A. Roebling's Sons Co., Trenton, N. J.
ROETEMP—Magnet wire. John A. Roebling's Sons Corp., Trenton, N. J.
ROEWELD—Welding cable. John A. Roebling's Sons Co. Trenton, N. J.
ROKIDE—Ceramic coatings. Norton Co. Worcester, Mass.
ROLL-A-BENCH—Mobile steel work bench. The Overbeke-Kain Co., Bedford, Ohio
ROLLALOY—Electrode for rebuilding rolls. Industrial Overlay Metals, Inc., Eaton, Ohio
ROLL MATRIX—Build-up electrode. All-State Welding Alloys Co., Inc., White Plains, N. Y.
ROL-MAN—Electric repointer bars, plate, bars (round and flat). Manganese Steel Forge Co., Philadelphia, Pa.
ROLTOE—Toe lift hydraulic jacks. Templeton, Kenly & Co., Broadview, Ill.
ROMAN BRONZE—Bronze rod. Revere Copper and Brass, Inc., New York, N. Y.
ROME 60 & 40—Welding cable. Rome Cable Corp., Rome, N. Y.
ROSS—Control and operating valves. Ross Operating Valve Co., Detroit, Mich.
ROTADRILL—Truck mounted, crawler mounted drills. Schramm, Inc., West Chester, Pa.
ROTAIR FURNACE—Furnace. Eclipse Fuel Engineering Co., Rockford Ill.
ROTO-GUIDE—Positioner and rotator. The Guide-Weld Co., Fresno, Calif.
ROTO-JIG—Work center. Duramic Products, Inc., New York, N. Y.
ROTOR—Pneumatic tools. Rotor Tool Co., Cleveland Ohio
ROTO-VEYOR—Completely automatic bar feed for horizontal metal cutting band sawing machines. Wells Manufacturing Corp., Three Rivers, Mich.
ROUST-A-BOUT—Plain end pipe couplings. Victaulic Co. of America, Elizabeth, N. J.
ROYAL—Hardening compound. Anti-Borax Compound Co., Fort Wayne, Ind.
ROYAL CLIPPER—Metal cutter and shrinker; metal stretcher and crimper; cable splicing and joggling blocks; rivet cutter. C. B. Tool Co., Lancaster, Pa.
ROYALITE—Grinding wheels. U. S. Rubber Co., Fort Wayne, Ind.
RSNI—Silver brazing alloy. Handy & Harman, New York, N. Y.
RUBBERLOKT—Rotary wire brushes. Hewitt Rubber Div., Hewitt-Robins, Inc., Stamford, Conn.
RUBBON—Fluxless aluminum solder. All-State Welding Alloys Co., Inc., White Plains, N. Y.
RUBWET—Waterproof abrasive. Armour & Co., Alliance, Ohio
RUBY'S—Stainless steel soldering flux. The Ruby Chemical Co., Columbus, Ohio
RUBY FLUID—Soldering and tinning flux and cored solder. The Ruby Chemical Co., Columbus, Ohio
RUCCO—Liquid soldering flux. The Ruby Chemical Co., Columbus, Ohio
RUEMELIN—Welding fume collector. Ruemelin Mfg. Co., Milwaukee, Wis.
RUF-NEK—Magnetic arc welding alloy additives. Western Carbide Corp., North Hollywood, Calif.
RUF-TRED—Electrode holder. Metallizing Engineering Co., Inc., Long Island City, N. Y.
RUFLUX 61—Rutile milled. Titanium Alloy Mfg. Div., National Lead Co., New York, N. Y.
RUFLUX 84—Rutile granular. Titanium Alloy Mfg. Div., National Lead Co., New York, N. Y.
RUFLUX P—Potassium titanate. Titanium Alloy Mfg. Div., National Lead Co., New York, N. Y.
RUFLUX S—Sodium titanate. Titanium Alloy Mfg. Div., National Lead Co., New York, N. Y.
RUFLUX T—Zirconium oxide. Titanium Alloy Mfg. Div., National Lead Co., New York, N. Y.
RUNWEL—Mechanical packing. Greene, Tweed & Co., North Wales, Pa.
RUSTICON—Rust preventives. Philadelphia Quartz Co., Philadelphia, Pa.
RUST-BLOC No. 20—Rust preventive. Turco Products, Inc., Los Angeles, Calif.
RUSTOLEUM—Rust preventive coating. Rustoleum Corp., Evanston, Ill.
RUSTRIPPER—Alkaline deruster. Oakite Products, Inc., New York, N. Y.
RUST SHIELD—Rust preventive. The Wilbur & Williams Co., Boston, Mass.
RUST-SOL—Rust remover. Klem Chemical, Inc., Dearborn, Mich.
RUST VETO—Rust preventive. E. F. Houghton & Co. Philadelphia, Pa.

S

6S—Electrode holder. Martin Wells, Inc., Los Angeles, Calif.
S.C.S. No. 7—Flux. Farrelloy Co., Philadelphia, Pa.
SF—Acetylene generators, soldering and brazing equipment, welding and brazing fluxes, accessories, etc. Sight Feed Generator Co., West Alexandria, Ohio
S. G. I.—Compressed cylinder gases. Steele Gases, Inc., Div. of Air Products, Inc., Forest Park, Ill.
SM—A-c—d-c electrode. Harnischfeger Corp., Milwaukee, Wis.
S MONEL—Silicon-bearing Monel. The International Nickel Co., Inc., New York, N. Y.
S-M-S—Resistance welder electrodes and tips, rod stock, forgings and castings, seam welding wheels and rolls, flash and projection welding dies, electrode holders, etc. S-M-S Corp., Detroit, Mich.
SR—Corrosion and heat resistant alloys. Uniworld Research Corp. of America, Cleveland, Ohio
SR-4—Strain gage. Baldwin-Lima-Hamilton Corp., Philadelphia, Pa.
S.R.P.—Rust preventive. L. Sonneborn Sons, Inc., New York, N. Y.
SS HIGH STRENGTH—Alloy welding rod. Steel Sales Corp., Chicago, Ill.
SW—Line of electrodes. A. O. Smith Corp., Milwaukee, Wis.
SW 44 and 45—Iron-powder electrodes. A. O. Smith Corp., Milwaukee, Wis.
SWWCO—Shear blades or knives. Simonds Worden, White Co., Dayton, Ohio
SADCO—Oxygen and acetylene. Houston Oxygen Co., Inc., Houston, Texas
SAF-HED—Safety hat. United States Safety Service Co., Kansas City, Mo.
SAF-I-FLEX—Goggle. United States Safety Service Co., Kansas City, Mo.
SAF-I-LENS—Lenses, welding and chipping. United States Safety Service Co., Kansas City, Mo.
SAF-I-SHIELD—Chippers goggles. United States Safety Service Co., Kansas City, Mo.
SAF-I-SPECS—Spectacle type goggle. United States Safety Service Co., Kansas City, Mo.
SAF-I-WELD—Welding helmet. United States Safety Service Co., Kansas City, Mo.
SAF-T—Leather safety garments, leather and asbestos curtains. Aliay Mfg. Co., Inc., Philadelphia Pa.
SAF-T-CUT—Abrasive discs, wheels. Bay State Abrasive Products Co., Westboro, Mass.
SAF-VUE—Thermacote Co., Pasadena, Calif.
SAFCO—Safety clothing and equipment. Safety Clothing and Equipment Co., Cleveland, Ohio
SAFE-T-CHECK—Regulators. Modern Engineering Co., St. Louis, Mo.
SAFE-T-VIS—Protective goggles. The Univis Lens Co., Dayton, Ohio

SAFEWAY—Hand operated chain hoists. Wright Hoist Div., American Chain & Cable Co., Inc., York, Pa.
SAFE-WELD—Welding plates. Flood Safety Products Co., Chicago, Ill.
SAFE-WELD—Welding helmets. E. D. Bullard Co., Sausalito, Calif.
SAFETY—Grinding wheels. Simonds Worden, White Co., Dayton, Ohio.
SAFETY CIRCLE—Motors. Allis-Chalmers Mfg. Co., Milwaukee, Wis.
SAFETY SERVICE—Welding helmets. Safety Equipment Service Co., Cleveland, Ohio
SAFRONT—Pneumatic welder timer. Square-D Co. Industrial Controller Div., Milwaukee, Wis.
SAFTEX—Hard-resin abrasive grinding wheel. Metal Removal Co., Chicago, Ill.
SAL BRICK—Solid sal ammoniac for cleaning and tinning soldering irons. American Solder and Flux Co., Philadelphia, Pa.
SALSBURY—Pneumatic air hammer. Salsbury Corp., Los Angeles, Calif.
SAM—Semiautomatic welding head manipulator. The Pandjiris Weldment Co., St. Louis, Mo.
SAMCO—Clamps, tool handles, ladles, pots and kettles, circular and hole saws, cylinder trucks. Syracuse Alloy Metals Corp., Syracuse, N. Y.
SAMSON—Wire wheel and rotary wire brushes. The Manufacturers Brush Co., Cleveland, Ohio
SANDBRUTE—Portable electric grinder. The Nedco Co., Waltham, Mass.
SAND-O-FLEX—Contour sanding wheel. Merit Prod., Inc., Los Angeles, Calif.
SAND SCREEN—Open-mesh abrasives. The Carborundum Co., Niagara Falls, N. Y.
SANIGLAS—Spectacle type goggle with side shields. American Optical Co., Southbridge, Mass.
SANKEY—Foot and shin guards. Safety Clothing & Equip. Co., Cleveland, Ohio
SAOCO—Oxygen acetylene. Houston Oxygen Co., Houston, Texas
SAW GUN—Power driven hack saw and file. Mid-States Welder Mfg. Co., Chicago, Ill.
SAWZALL—Portable electric hacksaw. Milwaukee Electric Tool Corp., Milwaukee, Wis.
SAXTON KANT-TWIST—Adjustable and "C" type clamps. Saxton Manufacturing Co., El Monte, Calif.
SCALEMASTER—Hammers, chipping and scaling. The Fibre-Metal Products Co., Chester, Pa.
SCALEMASTER—Weld cleaning tool. Industrial Products Co., Philadelphia, Pa.
SCALE-OFF—Rust and scale remover. Kelite Products, Inc., Los Angeles, Calif.
SCIAKY—Resistance welding equipment which includes spot welders, seam and roll spot welders, flash-butt welders, projection welders, multiple head spot welders and portable equipment. A-C and D-C resistance welders. Sciaky Bros., Chicago, Ill.
SCOPEMASTER—Fluorescent X-ray unit. General Electric Co., X-Ray Dept., Milwaukee, Wis.
SCORFILL—Alloy used to fill scored automobile and other cylinders. Smith Welding Equipment Corp., Minneapolis, Minn.
SCOTCH—Tapes. Minnesota Mining & Mfg. Co., St. Paul, Minn.
SCOTCH-GRINDER—Combination grinder-dust collector. Hisey-Wolf Machine Co., Cincinnati, Ohio
SCRATCHMASTER—Wire brushes. The Fibre-Metal Products Co., Chester, Pa.
SCRUGUN—Electric screw drivers. Black & Decker Mfg. Co. The, Towson, Md.
SCULLGUARDS—Safety hats. Mine Safety Appliances Co., Pittsburgh, Pa.
SEACO—Hardfacing electrodes. Stulz-Sickles Co., Newark, N. J.
SEAL KRAX—Solder bars. Modern Engineering Co., Inc., St. Louis Mo.
SEAL LOCK—Magnetic particle inspection equipment. U.S. Casting Repair Corp., Philadelphia, Pa.
SEAL-OFF—Solenoid operated air valves. The Taylor-Winfield Corp., Warren, Ohio
SEAL-TIGHT—A-c arc welders. Will-Weld Mfg. Co., Inc., Omaha, Neb.
SEAL-X-O—Filler for rough and porous welds. Metal Bond Mfg. Co., Montgomery City, Mo.
SEALTITE—Electrical wiring conduit. American Metal Hose branch, American Brass Co., Waterbury, Conn.
SEARCHLIGHT—Acetylene cylinders. Air Reduction Sales Co. New York, N. Y.
SECUREYE—Face shield. Pulmosan Safety Equipment Corp., Brooklyn, N. Y.
SECURITY FLEX—Arc welding cable. Anaconda Wire & Cable Co., New York, N. Y.
SEEDORFF—Portable resistance welders for spot welding and tacking. A. P. Seedorff & Co., Inc., Bell, Calif.
SEEL COTE—Weld protection alloy. Fusion Engineering, Cleveland, Ohio
SEEM-WELDO—Seam weld timer. National Time and Signal Corp., Detroit, Mich.
SEL-BLUE—White filament blue lens. Sellstrom Manufacturing Co., Palatine, Ill.
SELFWELD—Arc welding electrode for the hobbyist. Lincoln Electric Co., Cleveland, Ohio
SEL-GREEN—Hardened green lens. Sellstrom Manufacturing Co., Palatine, Ill.
SEL-HARD—Hardened clear lenses. Sellstrom Manufacturing Co., Palatine, Ill.
SEL-O-MATIC—Adjustment for helmets. Sellstrom Manufacturing Co., Palatine, Ill.
SEMCO—Dies, press equipment, special machines. Service Machine Co., Elizabeth, N. J.
SEL-SAFE—Laminated clear lens. Sellstrom Mfg. Co. Palatine, Ill.
SEL-XX—Goggle and helmet lens. Sellstrom Mfg. Co., Palatine, Ill.
SEL-O-MATIC—Welding helmets. Sellstrom Mfg. Co., Palatine, Ill.
SERVALL—Welding hose. Hewitt-Robins, Inc., Stamford, Conn.
770 FLUX—Submerged arc flux. Lincoln Electric Co., Cleveland, Ohio.
SEVERN—Ferrite indicator. Severn Engineering Co., Inc., Annapolis, Md.
SEYMOUR—Bronze welding rods. The Seymour Mfg. Co., Seymour, Conn.
SHAWINIGAN—Calcium carbide. Shawinigan Products Corp., New York, N. Y.
SHEAR-SEAL—Valves. Barksdale Valves, Los Angeles, Calif.
SHELL INDUSTRIAL GAS—Liquefied petroleum gas. Shell Oil Co., Inc., New York, N. Y.
SHERMAN—Couplings and fittings and connectors and lugs. H. B. Sherman Mfg. Co., Battle Creek, Mich.
SHIELDALLOY—Electrode-coating materials. Shieldalloy Corp., Newfield, N. J.
SHIELD-ARC—D-c welding machines and electrodes. Lincoln Electric Co., Cleveland, Ohio
SHIELD BRAND—Twist drills, grinding wheel dressers, bolt stocks and dies. Standard Tool Co., Cleveland, Ohio
SHIELDED STUDS—Welding studs. Shielded Stud Welding Co., Long Beach, Calif.
SHIFTWEIGHT—Wire reels. Moslo Machinery Co., Cleveland, Ohio
SHIPCO—Steel welding wire and aluminum welding rods. Superior Oxy-Acetylene Machine Co., Hamilton, Ohio
SHOBER—Mild and stainless steel electrodes, gas welding wire, cable connectors, and arc welders. Shober Inc., Stockton, Calif.
SHOOT-A-LITE—Gas lighter. Shoot-A-Lite Corporation, New York, N. Y.
SHOP CADDY—Hand lift truck. Grand Specialties Co., Chicago, Ill.
SHOP-KING—Arc welders. Precision Welder Mfg. Co., Chicago, Ill.
SHOP MULE—Welding tractor. Buda Div., Allis-Chalmers Mfg. Co., Harvey, Ill.
SHORTSTUB—Electrode holders. Bernard Welding Equipment Co., Chicago, Ill.
SHORTY—Portable electric drill. Black & Decker Mfg. Co., The, Towson, Md.
SHRADER—Magnetic welding positioners and contractors, flame-cutting guides and inspection equipment. F. W. Shrader Co., Culver City, Calif.
SHURLITE—Torch and gas lighters and flints. G. C. Fuller Mfg. Co., Cincinnati, Ohio
SIERRA—Welding flux. Sierra Welding Flux Co., Temple City, Calif.
SIGHT FEED—Portable and stationary acetylene generators and acetylene compressing plants, welding equipment and accessories. Sight Feed Generator Co., West Alexandria, Ohio
SIGMA—Mig (metal inert-gas) welding equipment. Linde Co., New York, N. Y.
SIL-AID—Silver brazing alloys. United Wire & Supply Corp., Providence, R. I.
SIL-BOND—Silver brazing alloys. United Wire & Supply Corp., Providence, R. I.
SIL-CO—Low temperature brazing alloy. United Wire & Supply Corp., Providence, R. I.
SIL-CARB—Silicorn carbide papers and cloths. Clover Manufacturing Co., Norwalk, Conn.
SILENT HOIST—Winches and capstans. Silent Hoist & Crane Co., Brooklyn, N. Y.
SILENTVANE—Exhaust Fans. Westinghouse Electric Corp., Pittsburgh, Pa.
SIL-FLUX—Brazing fluxes. United Wire & Supply Corp., Providence, R. I.
SIL-FOS—Silver brazing alloy. Handy & Harman, New York, N. Y.
SILFRAM—Cast hardfacing rod. Stoody Co., Whittier, Calif.
SIL-GON—Low temperature brazing alloy. United Wire & Supply Corp., Providence, R. I.
SIL-LO—Low temperature brazing alloy. United Wire & Supply Corp., Providence, R. I.
SIL-LOY—Low temperature brazing alloy. United Wire & Supply Corp., Providence, R. I.
SILK-HAT—Tinning compounds and fluxes. Alwarth Chemical Corp., New York, N. Y.
SIL-TEX—Low temperature brazing alloy. United Wire & Supply Corp., Providence, R. I.
SIL-TITE—Silver brazing alloys. United Wire & Supply Corp., Providence, R. I.
SILTUBE—Low melting silver brazing alloy. All-State Welding Alloys Co., Inc., White Plains, N. Y.
SILVALOY—Silver brazing alloys and fluxes. The American Platinum & Silver Div., Newark, N. J.
SILVALOY—Alloy steel, shafting steel. Pyramid Steel Co., Cleveland, Ohio
SILVALOY—Silver solders. Steel Sales Corp., Chicago, Ill.
SILVALOY—Welding, brazing and soldering flux. Linde Co., New York, N. Y.
SILVER—Welding electrodes. American Agile Corp., Cleveland, Ohio
SILVER MAGIC—Silver solder. Universal Welder Corp., Cleveland, Ohio
SILVER PHOSTUBE—Phosphor copper silver brazing alloy. All-State Welding Alloys, Inc., White Plains, N. Y.
SILVER STAR—Lightweight cutting torch. Smith Welding Equipment Corp., Minneapolis, Minn.
SILVER STREAK—Aluminum oxide abrasive coated cloth in disc and roll form. Abrasive Products, Inc., Lansdowne, Pa.
SILVER STREAK—Pneumatic drills. Joy Mfg. Co., Pittsburgh, Pa.
SIMEX—Abrasive wheels. Simonds Abrasive Co., Philadelphia, Pa.
SIMONDS—Metal cutting band saw blades. Simonds Saw & Steel Co., Fitchburg, Mass.
SIMPLEX—Jacks. Templeton, Kenly & Co., Broadview, Ill.
SIMPLEX—Electrode holder. The Fibre-Metal Products Co., Chester, Pa.
SIMPLEX—Oxyacetylene welding rod. Air Reduction Sales Co., New York, N. Y.
SIMPLEX-JENNY—Center hole, hydraulic puller. Templeton, Kenly & Co., Broadview, Ill.
SINGER—Gloves. Singer Glove Co., Chicago, Ill.
SITUFT—Brushes. The Osborn Mfg. Co., Cleveland, Ohio
6-S—Electrode holders. Martin Wells, Inc., Los Angeles, Calif.
62 INCONEL—Electrode for welding inconel. International Nickel Co., Inc., New York, N. Y.
64 K MONEL—Electrode for welding "K" monel. International Nickel Co., Inc., New York, N. Y.
600—Electrode for arc welding of cast iron. C. E. Phillips & Co., Detroit, Mich.
636-SERIES—Filters and dryers for gas and air. The Gasflux Co., Elyria, Ohio
660 FLUX—Submerged arc flux. Lincoln Electric Co. Cleveland, Ohio
SIX WAY HICKEYS—For ½ in to 1 in. conduit bending. Tal Bending Equipment, Inc., Milwaukee, Wis.
SKIL—Portable saws, drills, grinders, sanders, etc. Skil Corp., Chicago, Ill.
SKULLGUARD—Protective hat combined with a welding shield. Mine Safety Applications Co., Pittsburgh, Pa.
SKY-RIDE—Telescopic platform lift. Grand Specialties Co., Chicago, Ill.
SLAP-ON—Plow share reclaiming units. Wiese Plow Welding Co., Perry, Iowa
SLIP-ON—Cartridge renewal for a gas lighter. Safety Gas Lighter Co., Lynn, Mass.
SLIP-ON—Soldering tip. Anzick Mfg. Co., Van Dyke, Mich.
SLO-DRIVE—Drill press speed reducer. Cardinal Machine Co., Glendale, Calif.
SMITH DOLAN—Low-frequency induction-heating equipment. Electric Arc Inc., Newark, N. J.
SMITH'S—Welding and cutting torches, regulators, a-c arc welders, welding rods and electrodes, accessories and supplies, preheating torches, acetylene generators, etc. Smith Welding Equipment Corp., Minneapolis, Minn.
SMITHWAY—Welding electrodes and machines. A. O. Smith Corp., Milwaukee, Wis.
SMOOTH-ON—Iron, steel, aluminum and bronze cements. Smooth-On Mfg. Co., Jersey City, N. J.
SMOOTH-RUN—Abrasive belts, bands and sleeves. Clover Manufacturing Co., Norwalk, Conn.
SNAP-JOINT—Quick action toggle-type couplings. Victaulic Co. of America, Elizabeth, N. J.
SOCKET END WELDOLETS—Forged pipe welded fittings. Bonney Forge & Tool Works, Allentown, Pa.
SOD-R-BRAZE—Air acetylene torch and regulators. National Cylinder Gas Div., Chicago, Ill.
SOFTCAST—Shielded arc electrode. Hobart Brothers Co., Troy, Ohio
SOFTIE—Vinyl eyeshields. Glendale Optical Co., Inc., Valley Stream, N. Y.
SOFT IRONWELD—Coated iron electrode. Steel Sales Corp., Chicago, Ill.
SOFTWELD—Cast iron electrode. Lincoln Electric Co., Cleveland, Ohio
SOFTWELD—Welding flux. General Welding & Equipment Co., Boston, Mass.
SOL-A-DIE—Forming dies. Solar Aircraft Co., San Diego, Calif.
SOL-CON—Welding cable connector. Tweco Products, Inc., Wichita, Kans.
SOL-FLUX—Soldering flux. Klem Chemicals, Inc., Dearborn, Mich.
SOLAR—Stainless steel welding flux. Victor Equipment Co., San Francisco, Calif.
SOLDALOY—Copper alloys for soldering iron tips. P. R. Mallory & Co., Inc., Indianapolis, Ind.
SOLDERING FLUID—Soldering fluids. Johnson Manufacturing Co., Mount Vernon, Iowa
SOLDER-GUN—Fluxless soldering-magneto-strictive transducer. Alcar Instruments, Inc., New York 2, N. Y.
SOLDER-IT—Metallic compound to seal leaks in boilers, radiators, cracked cylinder heads, water jackets or engine blocks. York Engineering Co., Chicago, Ill.
SOLDER FLUX—Flux for repairing scored cylinders and for other soldering work. Smith Welding Equipment Corp., Minneapolis, Minn.
SOLDER-QUIK—Soldering tool. Stark Mfg. Co., Tuscaloosa, Ala.
SOMMER & ADAMS—Special machinery. The Federal Machine & Welder Co., Warren, Ohio
SONITE—Cover glass. Willson Products, Inc., Reading, Pa.
SONIZON—Ultrasonic thickness test instrument. Magnaflux Corp., Chicago, Ill.
SONOBOND—Unit for fluxless soldering. Sonobond Corp., Aero-projects Inc., West Chester Pa.
SONOFLUX—Magnetic inspection equipment. Peterson Machine Tool, Inc., Merriam, Kan.
SONOGEN—Ultrasonic power generator. Branson Instruments Inc., Stamford, Conn.
SPA-FLA—Portable welding shield. Frommelt Industries, Dubuque, Iowa
SPAREX—Rust and scale remover. American Chemical & Flux Co., Brooklyn, N. Y.

SPARKETTE—Burner igniters. Eclipse Fuel Engineering Co., Rockford, Ill.
SPAT-R-PRUF—Spatter preventive. York Engineering Co., Chicago, Ill.
SPATTER BAN—Coated cover plates. Kimball Safety Products Co., Cleveland, Ohio
SPATTER PROOF—Plastic cover lens. Willson Products, Inc., Reading, Pa.
SPATTER-EX—Spatter preventive. Wavne Chemical Products Co., Detroit, Mich.
SPATTER-SHIELD—Weld spatter coating. Marquette Mfg. Co., Inc., Minneapolis, Minn.
SPATTERPROOF—Lamp to withstand hot feld spatter and rough handling. Radiant Lamp Corp., Newark, N. J.
SPECTI-GOGGLE—Spectacle type goggles. Eastern Equipment Co., Inc., Willow Grove, Pa.
SPEC-PRO-TECTOR—Weldor's and industrial goggles. Eastern Equipment Co., Willow Grove, Pa.
SPECIAL TITE-KOTE—Coated manganese nickel steel electrodes. Stulz-Sickles Co., Newark, N. J.
SPEEDEMON—Iron-powder electrode. The Champion Rivet Co., Cleveland, Ohio
SPEEDEX—Powder-metal electrode. Metal & Thermit Corp., Rahway, N. J.
SPEED KING—Cutting torch. Harris Calorific Co., Cleveland, Ohio
SPEED ROD No. 44—Mild steel electrode. Champion Rivet Co., Cleveland, Ohio.
SPEEDARC—Electric arc welding machines. Ideal Electric & Manufacturing Co., Mansfield, Ohio
SPEEDI-BURN—Flame cutting machine. Speedi-Burn Products Co., Inc., West Hempstead, N. Y.
SPEEDOMATIC—Automatic arc welding wire. Steel Sales Corp., Chicago, Ill.
SPEEDVICE—Hydraulic bench vises w/foot operator. Studebaker Machine Co., Maywood, Ill.
SPEEDWAY—Electric hoists. Wright Hoist Div. of American Chain & Cable Co., Inc., York, Pa.
SPEEDWAY—Portable electric drills and electric bench grinders. Speedway Mfg. Co., Cicero, Ill.
SPEED-WET—Waterproof coated abrasive. Behr-Manning Corp., Troy, N. Y.
SPEEDWITCH—Flexible shaft grinder. Charles L. Jarvis Co., Middletown, Conn.
SPEEDWITCH—Coated electrode. Eastern Equipment Corp., Willow Grove, Pa.
SPEEDY—Helmet attachment for clipping helmet to safety cap. The Fibre-Metal Products Co., Chester, Pa.
SPEEDY ATTACHMENT—Helmet attachment. Safety Div. of Davis Emergency Equip. Co., Newark, N. J.
SPEER—Carbon arc welding rods, welding plates and welding paste; welding generator and motor brushes. Speer Carbon Co., St. Marys, Pa.
SPEKALUMINITE—Anti-porosity compound. Special Chemicals Corp., Ossining, N. Y.
SPERRY—Resistance type flash butt welder. Sperry-Rand Corp., Danbury, Conn.
SPIRABAND—Coated abrasive. Behr-Manning Corp., Troy, N. Y.
SPIRABELT—Coated abrasive. Behr-Manning Corp., Troy, N. Y.
SPIRATUBE—Cloth covered flexible tubing. Warner Bros. Co., Bridgeport, Conn.
SPIREX—Nozzle elements for regulators. National Cylinder Gas Div., Chicago, Ill.
SPITFIRE—Resin disc. Abrasive Products, Inc., Lansdowne, Pa.
SPLICIT—Automatic line splice for joining lines or cables. Burndy Engineering Co., Norwalk, Conn.
SPONGE-AIRE—Sweatbands. Flexo Products, Inc., Westlake, Ohio
SPOTCHECK—Dye penetrant inspection material. Magnaflux Corp., Chicago, Ill.
SPRA ROD—Metallizing wire. Spra Rod Corp., Cleveland, Ohio.
SPRAYWELDER—A powder metallizing unit. Wall Colmonoy Corp., Detroit, Mich.
SPREADARC—Automatic welding attachment. Lincoln Electric Co., Cleveland, Ohio
SPRINGTITE—Electrode holder. McClary & Byers Equipment Co., Oakland, Calif.
SQUARE D—Resistance welder control. Square D Co., Industrial Controller Div., Milwaukee, Wis.
SQUEEZE-GRIP—Carbon dioxide portble fire extinguishers (discharge valve). C-O-Two Fire Equipment Co., Newark, N. J.
SQUIRT WELDER—Semiautomatic submerged arc welder. Lincoln Electric Co., Cleveland, Ohio
STA-SET—Finger guards. American Optical Co., Southbridge, Mass.
STABLE-ARC—Mild steel electrodes. Lincoln Electric Co., Cleveland, Ohio
STAB-L-FLOW—Gas mixers for oxyacetylene equipment. National Cylinder Gas Div., Chicago, Ill.
STACKPOLE—Arc welding and brazing carbons, welding tips, generator brushes, welding paste, etc. Stackpole Carbon Co., St. Marys, Pa.
STAC-VENT—Goggles. Watchmoket Optical Co., Inc., Providence, Rhode Island.
STAIN-CRAFT—Electrodes for welding chrome and nickel stainless steel and chromium-iron. Allied Weld-Craft, Inc., Indianapolis, Ind.
STAIN-ROD—Stainless steel electrodes. Marquette Manufacturing Co., Inc., Minneapolis, Minn.
STAINITE—Tin cleaner. Turco Products, Inc., Los Angeles, Calif.
STAINLEND—Stainless steel electrodes for AC-DC welding. Arcos Corp., Philadelphia, Pa.
No. 6 STAINLESS—Steel soldering flux. Farrelloy Co., Philadelphia, Pa.
ST. PIERRE—Combination hammer, chisel and brush for use in cleaning welds. St. Pierre Chain Corp., Worcester, Mass.
STAINALOY—Resistance welding electrodes. Acme Electric Welder Co., Los Angeles, Calif.
STAINWELD—Stainless steel electrodes. Lincoln Electric Co., Cleveland, Ohio
STANDARD—Fire extinguisher. Miller-Peerless Mfg. Co., Chicago, Ill.
STANDARD—Welding positioner. Standard Machinery Co., Providence, R. I.
STANDARD—Electric resistance welded carbon steel mechanical and pressure tubing. The Standard Tube Co., Detroit, Mich.
STANDARD—Soldering handpiece. Wassco Electric Products Corp., Joliet, Ill.
STANLEY—Portable electric grinders, sanders, bench grinders, drills and motor driven shears. Stanley Electric Tool Div., The Stanley Works, New Britain, Conn.
STAR—Plow points. Star Manufacturing Co., Division of Illinois Iron & Bolt Co., Carpentersville, Ill.
STAR—Wire wheel brush sections. Anderson Corp., Worcester, Mass.
STAR J—Metal-cutting tools. Haynes Stellite Co., Kokomo, Ind.
STAR-JET—Oxyacetylene torch. Marquette Mfg. Co., Inc., Minneapolis, Minn.
STAR WELDER—Spot and butt welders. Ames Spot Welder Co., Inc., Brooklyn, N. Y.
STASAFE—Protective clothing, face shields. Standard Safety Equipment Co., Chicago, Ill.
STASAFE HAIRGARD—Cap fitted with a transparent acetate visor. Standard Safety Equipment Co., Chicago, Ill.
STATIFLUX—Electrostatic inspection equipment. Magnaflux Corp., Chicago, Ill.
STATOSEC—Shape cutting machine. The Burdett Oxygen Co., Cleveland, Ohio
STAY-PUT—Clamps, hose. J. N. Fauver Co., Inc., Detroit, Mich.
STEEL GRIP—Protective clothing; gloves; mittens, aprons, spats and leggings made with steel reinforcing. Industrial Gloves Co., Danville, Ill.
STEEL HANDLER—All leather gloves. Advance Glove Mfg. Co., Detroit, Mich.
STEEL-CLAD—Rotary wire wheel brush. The Milwaukee Brush Mfg. Co., Milwaukee, Wis.
STEEL-CLAD—Pneumatic grinders and wire brush machines. Chicago Pneumatic Tool Co., New York, N. Y.
STEELARC—High speed electrode. All-State Welding Alloys Co., White Plains, N. Y.
STEELETTS—Steel grit abrasive. Wheelabrator Corp., Mishawaka, Ind.
STEELGARD—Rust preventive. Harry Miller Corp., Philadelphia, Pa.
STEELRITE—Crayon for marking steel. Whittaker, Clark & Daniels, Inc., New York, N. Y.
STEELWELD—Shears & presses. The Cleveland Crane & Engineering Co., Wickliffe, Ohio
STEFFAN—Blow torch. National Welding Equip. Co., San Francisco, Cal.
STEINER—Drying ovens for coated electrodes. Steiner-Ives Co., Union, N. J.
STELCO—Welding tips. Dockson Corp., Detroit, Mich.
STERLING—Flints for torch lighters. Flint Products Co., Brooklyn, N. Y.
STOODITE—Hardfacing rods and electrodes. Stoody
STOODY—Hardfacing alloys in rod electrode and coiled-wire forms. Stoody Co., Whittier, Calif.
STOODY SELF-HARDENING—Hardfacing rods and electrodes. Stoody Co., Whittier, Calif.
STOP-FIRE—Fire extinguishers. Stop-Fire, Inc., Brooklyn, N. Y.
STOP-OFF—Masking paint. Superweld Corp., North Hollywood, Calif.
STOW—Flexible shaft machines; flexible shaft power drives and flexible shaft remote controls for valves, etc. Stow Manufacturing Co., Binghamton, N. Y.
STRAIGHT HOLDERS—Holders. S-M-S Corp., Detroit Mich
STRAIGHT LINE—Welding tips, forgings, rod, and seam welder wheels. Tipaloy, Inc., Detroit, Mich.
STRAND FLEX—Flexible shaft machines. N. A. Strand Div., Franklin Balmar Corp., Baltimore, Md.
STRATE-LINE—Cable connectors, plugs and receptacles. The Pyle-National Co., Chicago, Ill.
STREAMLINE—Steel tape rule. Master Rule Mfg. Co., Middletown, N. Y.
STREAMLINE JUNIOR—200 amp. gas engine driven arc welder. Hobart Bros. Co., Troy, Ohio
STREAMLINER—Helmets and handshields. Metro Mfg. Co., Long Island City, N. Y.
STEAM-POWER—Portable air tools. Buckeye Tools Corp., Dayton, Ohio
STEEL SHOT—Blast-cleaning and peening abrasive. Wheelabrator Corp., Mishawaka, Ind.
STEELTECTIC—Mild steel electrode. Eutectic Welding Corp., Flushing, N. Y.
STRIPTEX—Paint, lacquer and enamel stripper. Diversey Corp., Chicago, Ill.
STRONGCAST—Steel electrode. Hobart Brothers Co., Troy, Ohio
STRYCO—Resistance welders, cranes and hoists, trolleys, tracks and craneways and resistance welding transformers. Stryco Mfg. Co., San Francisco, Calif.
STUBBY—Electrode holders. Martin Wells, Inc., Los Angeles Calif.
STURDI-BILT—Wire cup power brushes. The Milwaukee Brush Mfg. Co., Milwaukee, Wis.
STURDY-WEAVE—Asbestos clothing, gloves, leggings, aprons, etc. The Safety Equipment Service Co., Cleveland, Ohio
STYLE 10—Black oxyacetylene hose. Republic Rubber Div., Lee Rubber & Tire Corp., Youngstown, Ohio
STYLE 20—Red oxyacetylene hose. Republic Rubber Div., Lee Rubber & Tire Corp., Youngstown, Ohio
STYL-IZE—Safety spectacles. United States Safety Service Co., Kansas City, Mo.
SULFLO—Cutting oils and solder fluxes. Sulflo, Inc., Elizabeth, N. J.
SUPAIRCO—Oxygen & Acetylene generators and manifolds. Superior Air Products Co., Newark, N. J.
SUPER—Welding torches. Modern Engineering Co., St. Louis, Mo.
SUPER ALLOY—Hardfacing alloy. Resisto-Loy Co., Grand Rapids, Mich.
SUPER ARMOR PLATE—Hardened lenses. American Optical Co., Southbridge, Mass.
SUPER CUTNO—Mechanical packing. Greene, Tweed & Co., North Wales, Pa.
SUPER G—Paste type solders. Fusion Engineering, Cleveland, Ohio
SUPER GRY ALLOY—Wire screen cloth. Hewitt-Robins, Inc., Stamford, Conn.
SUPER MICRO-TOXISOL—Respirator. American Optical Co., Southbridge, Mass.
SUPER NICKEL-CLAD STEEL—Clad steel nickel bonded to a base plate of steel. Lukens Steel Co., Coatesville, Pa.
SUPER-SAFETY—Lenses for grinding and chipping goggles. Chicago Eye Shield Co., Chicago, Ill.
SUPER SERVICE—Welding power cables. General Cable Corp., New York, N. Y.
SUPER SIGHT—Light magnifiers. The Boyer Campbell Co., Detroit, Mich.
SUPER T—Paste type solders. Fusion Engineering, Cleveland, Ohio
SUPER-CLAMPS—Clamps. The Cincinnati Tool Co., Cincinnati, Ohio
SUPERCYCLE—Weld cleaning tools. Chicago Pneumatic Tool Co., New York, N. Y.
SUPER-DREDNAUT—Goggles and lenses. Safety Equipment Service Co., Cleveland, Ohio
SUPER-E—Paste type solders. Fusion Engineering, Cleveland, Ohio
SUPER-EBONITE—Hose. Quaker Rubber Co., Philadelphia, Pa.
SUPERETTE—Electrode holders. Lenco, Inc., Jackson, Mo.
SUPERFLEX—Thermostat bimetal. American Silver Co., Inc., Flushing, N. Y.
SUPERFLEX—Kickless dual-conductor welding cables. Uniflex Cable Div., Ypsilanti, Mich.
SUPERGARD—Finger protection. Industrial Gloves Co., Danville, Ill.
SUPERGLAS—Safety hats and caps. Fibre-Metal Products Co., Chester, Pa.
SUPERGOGGLE—Goggles for welding and cutting. Jackson Products. Air Reduction Sales Co., Warren, Mich.
SUPERIOR—Testing machines. Steel City Testing Machines, Inc., Detroit, Mich.
SUPERIOR—Welding and cutting torches, accessories, supplies, acetylene generators, etc. Superior Oxy-Acetylene Machine Co., Hamilton, Ohio
SUPERIOR- Welding positioners and turntables. Superior Welding Co., Los Angeles, Calif.
SUPERIOR—Cylinder valves. Superior Valve & Fittings Co., Pittsburgh, Pa.
SUPERIOR—Welding, soldering and brazing fluxes. Superior Flux & Mfg. Co., Cleveland, Ohio
SUPERIOR—Compressed gases. Superior Industrial Gas Corp., Astoria, N. Y.
SUPERIOR HEAVY DUTY—Chipping and scaling hammers. Superior Pneumatic & Mfg., Inc., Cleveland, Ohio
SUPER-JET—Heavy duty oxyacetylene torch. Marquette Mfg. Co., Inc., Minneapolis, Minn.
SUPERLECTRIC—Electrical safety hats and caps. The Fibre Metal Products Co., Chester, Pa.
SUPERLITE—Aluminum safety hats and caps. The Fibre Metal Products Co., Chester, Pa.
SUPERMEL—Insulation for electrode holders. Tweco Products, Inc., Wichita, Kans.
SUPERPHONE—Loudspeaker diving telephone for underwater cutting and welding. Craftsweld Equipment Corp., Long Island City, N. Y.
SUPER SERVICE—Neoprene covered heavy-duty portable cable. General Cable Corp., New York, N. Y.
SUPERSHEATH—Insulated neoprene jacketed cable. General Cable Corp., New York, N. Y.
SUPERSOCKET—Detachable socket wrenches. J. H. Williams & Co., Buffalo, N. Y.
SUPER-SOLDER—Solder. Fusion Engineering Co., Cleveland, Ohio
SUPER-STOP—Masking paint. Superweld Corp., North Hollywood, Calif.
SUPER-TOUGH—Heat-treated goggle lenses. Willson Products, Inc., Reading, Pa.
SUPERTROL—Metal cleaner. Turco Products, Inc., Los Angeles, Calif.
SUPER-VENT—Chemical dust masks. American Optical Co., Southbridge, Mass.
SUPERWELD—Coated electrodes. Steel Sales Corp., Chicago, Ill.
SUPER-X—Welding and cutting torches. Modern Engineering Co., Inc., St. Louis, Mo.
SUPRALOY—Hardfacing electrodes. Industrial Overlay Metals, Inc., Eaton, Ohio
SUR-BRAZE—Ceramic tool for brazing, welding, etc. Duramic Products, Inc., New York, N. Y.
SURE BRAZE—Brazing alloys. Dalweld Co., Inc., Mt. Vernon, N. Y.
SUREGRIP—Electrode holders. Martin Wells, Inc., Los Angeles, Calif.
SUREWELD—Electrodes, arc welders, spot welders. National Cylinder Gas Div., Chicago, Ill.
SURFACE—All types of heat treat furnaces. Surface Combustion Co., Toledo, Ohio

SURFACEWELD—Hardfacing powder. Lincoln Electric Co., Cleveland, Ohio
SURFALLOY — Welding alloys. Eutectic Welding Alloys Corp., Flushing, N. Y.
SWEAT-ON—Fluxes or alloys for joining materials. Eutectic Welding Alloys Co., Flushing, N. Y.
SWEDG-ON—Cable lugs and sleeves. Lenco, Inc., Jackson, Mo.
SWEAT-ON-PASTE—Hardfacing paste. Wall Colmonoy Corp., Detroit, Mich.
SWETITE—Paste solder. Alpha Metals, Inc., Jersey City, N. J.
SWIFT—Resistance welding equipment. Swift Electric Welder Co., Detroit, Mich.
SWIFT-O-MATIC—Air-hydraulic flash welder. Swift Electric Welder Co., Detroit, Mich.
SWIFTWELD—Mild steel electrode. Lincoln Electric Co., Cleveland, Ohio
SWING-TITE—Welders' clamp. Wetzler Clamp Co., Inc., Long Island City, N. Y.
Laboratory, Cleveland, Ohio
SWISS—Solders, solder paddles and fluxes, tinning compound, wire wheels and brushes. Swiss Co., Whittier, Calif.
SYMBOL HAMMERS—Weldor's identification hammer. Atlas Welding Accessories, Inc., Ferndale, Mich.
SYNCHROMATIC—Flash welder. Thomson Electric Welder Co., Lynn, Mass.
SYNCRO-BREAK — Magnetic welder contactor. Square D Co., Industrial Controller Div., Milwaukee, Wis.
SYNCRO-TIMER—Precision timer. National Time & Signal Corp., Detroit, Mich.
SYNTRON—Chipping and scaling hammers, electric grinders, portable electric drills, portable gas-electric power plants. Syntron Co., Homer City, Pa.
SYRALL—Clamps, tool handles, ladles, pots and kettles, circular and hole saws, cylinder trucks. Syracuse Alloy Metals, Syracuse, N. Y.
SYTE-AYDE — Illumination kit. General Scientific Equipment Co., Philadelphia, Pa.

T

TD—Coated electrode. National Cylinder Gas Div., Chicago, Ill.
T-I—Constructural alloy steel. U. S. Steel Corp., Pittsburgh, Pa.
T-W—Resistance and automatic arc welding machines. The Taylor-Winfield Corp., Warren, Ohio
TW—Seamless gas cylinders. Taylor-Wharton Iron and Steel Co., Eaton, Pa.
TABLAST—Blast cleaning equipment. Wheelabrator Corp., Mishawaka, Ind.
TAG—Air pressure and resistance welding regulators. Weston Elec. Instrument Co., Newark, N. J.
TAKE-ABOUT—Portable electric hand sander. Porter-Cable Machine Co., Syracuse, N. Y.
TAL HYDRA-POWER PUMP—Mp-27 ½ h.p. motor pump. Tal Bending Equipment, Inc., Milwaukee, Wis.
TAL ONE-SHOT—½ in. to 8 in. pipe and tube benders, hydraulic and manual operated. Tal Bending Equipment, Inc., Milwaukee, Wis.
TAM—Alloys, refractories and cement. Titanium Alloy Manufacturing Div., Niagara Falls, N. Y.
TANARC—Electrode coating mineral. Foote Mineral Co., Philadelphia, Pa.
TANDEM—Timer control unit. Industrial Timer Corporation, Newark, N. J.
TAN DEVIL—Mild steel electrode. Champion Rivet Co., Cleveland, Ohio
TANK-WELL—Wrenches for acetylene tanks. Chicago Hardware Foundry Co., The, North Chicago, Ill.
TANTUNG—Alloy. Also welding rod and cutting tool taps. Fansteel Metallurgical Corp., North Chicago, Ill.
TANTUNG—Cast alloy tools, blanks and precision castings. Vascoloy-Ramet Corp., Waukegan, Ill.
TAPER-LOK—Cable connector. Erico Products, Inc., Cleveland, Ohio
TAPGUN—Portable tapgun. Black & Decker Mfg. Co., Towson, Md.
TAYLOR—Spiral and straight-seam welded pipes, forged fittings. Taylor Forge and Pipe Works, Chicago, Ill.
TAYLOR-FORGE — Electric, fusion welded pipe, forged pipe fittings, pipe flanges for welding, welding necks and flanges for tanks and other forged products. Taylor Forge and Pipe Works, Chicago, Ill.
TAYLOR-HALL—Spot welders. The Federal Machine Welder Co., Warren, Ohio
TAYLOR-WINFIELD — Resistance spot, projection, seam and flash-butt welding machines. The Taylor-Winfield Corp., Warren, Ohio
TEC—Tig welding torch with transparent cup. Tec Torch Co., Inc., Carlstadt, N. J.
TEMCO—Elecrtic furnaces and hot plates. Thermo Electric Manufacturing Co., Dubuque, Iowa
TEMCOMETER—Electric furnace controllers. Thermo Electric Manufacturing Co., Dubuque, Iowa
TEMP-ALARM — Temperature sensitive paint to signal overheating. Tempil Corp., New York, N. Y.
TEMPIL PELLETS — Temperature-indicating pellets. Tempil Corp., New York, N. Y.
TEMPILAQ—Temperature indicating paint. Tempil Corp. New York, N. Y.
TEMPILSTIKS—Temperature indicating crayon. Tempil Corp., New York, N. Y.
TENSILEND—Electrodes for welding high carbon, low alloy, high tensile and free machining steels. Arcos Corp., Philadelphia, Pa.
TENS-O-MATIC—Automatic welding wire. Allied Weld-Craft, Inc., Indianapolis, Ind.
TENSOX—Carbon steel. Central Steel & Wire Co., Chicago, Ill.
TEN-TO-ONE—Tinning paint. Swiss Laboratory, Cleveland, Ohio
TEST-WELL—Welding test plate. Chicago Hardware Foundry Co., Weld Rod Div., North Chicago, Ill.
TEX-DRIVE—Grinders and buffers. The Hitey Wolfe Machine Co., Cincinnati, Ohio
THEMAC — Portable electric grinders. The McGonegal Mfg. Co., E. Rutherford, N. J.
THERMACOTE—Spatter-proof cover lenses. Thermacote Co., Pasadena, Calif.
THERMALLOY 4—Manual hardfacing rods and electrodes. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
THERMIT—Thermit welding materials and supplies. Reade Mfg. Co. Inc., Jersey City, N. J.
THERMO—Tip cleaners, aligning clamps, torch liter and plastic cover lens. Thermacote Co., Pasadena, Calif.
THERMO-GRIP—Brazing outfits, incandescent carbon. Ideal Industries, Inc., Sycamore, Ill.
THERMO-LO BLUE—Welding cast iron flux. Farreloy Co., Philadelphia, Pa.
THERMO-LO PINK—Brazing cast iron, steel, bronze flux. Farreloy Co., Philadelphia, Pa.
THERMO-TIP — Resistance soldering equipment. Ideal Industries, Inc., Sycamore, Ill.
THERMOLYNE—Electric furnaces and electric furnace controllers. Thermo Electric Manufacturing Co., Dubuque, Iowa
THER-MONIC—Induction, dielectric and corebaking equipment. Induction Heating Corp., Brooklyn, N. Y.
THERMOTRODE — Heating electrodes. Eutectic Welding Alloys Corp., Flushing, N. Y.
THOM McAN—Safety shoes. Thom McAn Safety Shoe Div. of Melville Shoe Corp., New York, N. Y.
THOMSON OBI—Welding presses. Thomson Electric Welder Co., Lynn, Mass.
THOMSON—Spot butt seam, flash, multimatic spot, fabric welders, and other types of resistance welding machines. Thomson Electric Welder Co., Lynn, Mass.
THOR—Portable electric and pneumatic tools. Thor Power Tool Co., Aurora, Ill.
THREDOLETS—Forged pipe welding fittings. Bonney Forge and Tool Works, Allentown, Pa.
3M—Coated abrasives, abrasives and coatings. Minnesota Mining & Mfg. Co., St. Paul, Minn.
THREE-M-ITE—Abrasive cloth. Minnesota Mining and Mfg. Co., St. Paul, Minn.
TIGER—Welding and brazing flux. Columbia Chemical Products Co., Detroit, Mich.
TILLMAN—Leather gloves, mittens, garments, and supplies. John Tillman and Co., Long Beach, Calif.
TIME-SAVER—Torch lighter. Ellison Mfg., Mediapolis, Iowa
TINEZY—Tinning compounds. Farrelloy Co., Philadelphia, Pa.
TIN-EZY—Soldering compound and galvanizing compound. Johnson Mfg. Co., Inc., Mount Vernon, Iowa
TINKOTE—Tinning compound. Tinkote Co., Revere, Mass.
TINOL—Solder in paste form. American Solder and Flux Co., Philadelphia, Pa.
TIN-SPRED—Powdered tinning compound. Swiss Laboratory, Cleveland, Ohio
TINWELD—Solder—paste flux combination. Eutectic Welding Alloys Corp., Flushing, N. Y.
TIPALOY—Resistance welding electrodes. Tipaloy, Inc., Detroit, Mich.
TIP-O-LITER—Combination tip cleaner set and torch lighter. Thermacote Co., Pasadena, Calif.
TIPOX—Cutting tips. Oxo Equipment Co., New Lenox, Ill.
TIPPY—Resistance welding electrodes. Tipaloy, Inc., Detroit, Mich.
TIREX—Welding and power cables. Simplex Wire & Cable Co., Cambridge, Mass.
TISCO—Manganese weld rod. Taylor-Wharton Iron & Steel Co., Cincinnati, Ohio
TITAN—Deoxidized bronze alloy welding rods and other products. Titan Metal Manufacturing Co., Bellefonte, Pa.
TITAN-TOGGLE—Clamp. Detroit Stamping Co., Detroit, Mich.
TITANALBA—Titanium dioxide. Foote Mineral Co., Philadelphia, Pa.
TITANOX—Electrode coating material. Titanium Alloy Mfg. Div., National Lead Co., New York, N. Y.
TITE-KOTE — Nickel manganese steel electrodes. Stulz-Sickles Co., Newark, N. J.
TOBIN BRONZE—Copper, zinc, tin alloy. The American Brass Co., Waterbury, Conn.
TOCCO—Induction heating equipment. The Ohio Crankshaft Co. Tocco Div., Cleveland, Ohio
TOGGLE CLAMPS—Welding machines. Robert J. Kelly Mfg. Co., Detroit, Mich.
TOMAHAWK—Weld chipping hammer. Atlas Welding Accessories, Inc., Ferndale, Mich.
TOMBAC—Flux for brazing alloy steels and copper. Morey Flux and Chemical Co., Wilmington, Del.
TONG-GRIP—Electrode holders. Martin Wells, Inc., Los Angeles, Calif.
TONG TEST—Clamp-on type ammeter (a-c & d-c). Columbia Electric Mfg. Co., Cleveland, Ohio
TOOL-ARC—Tool and die electrodes. Alloy Rods Co., York, Pa.
TOOL-CRAFT—Tool steel welding electrodes, oil, air, water, work & hot work & hardening. Allied Weld-Craft, Inc., Indianapolis, Ind.
TOOL-N-DIE—Electrode for welding oil hardening, water hardening, air, hot work and high speed steels. Hobart Bros. Co., Troy, Ohio
TOOLFACE—Welding rods and electrodes. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
TOOLFACER—Alloy tool steel welding electrode. Hobart Brothers Co., Troy, Ohio
TOOLWELD—Hardfacing electrode. Lincoln Electric Co., Cleveland, Ohio
TOPPER—Steel tape rule. Master Rule Mfg. Co., Middletown, N. Y.
TORCHIE—Torch lighter. Thermacote Co., Pasadena, Calif.
TORCHKINK—Weldors gloves. Advance Glove Co., Detroit, Mich.
TORCH-O-MATIC—Soldering, brazing, preheating torch. Velocity Power Tool Co., Pittsburgh, Pa.
TORCHWELD—Oxyacetylene welding and cutting equipment. National Cylinder Gas Div., Chicago, Ill.
TORCO—Vises. Wilton Tool Mfg. Co., Chicago, Ill.
TORIT—Dust collectors and exhausters. Torit Manufacturing Co., St. Paul, Minn.
TOR-KON-VERTOR—Flame cutter. Superior Welding and Machine Co., Bartlesville, Okla.
TOTRUST—Rust preventive paint. The Wilbur & Williams Co., Boston, Mass.
TOUGH DEVIL—Nickel manganese electrode. The Champion Rivet Co., Cleveland, Ohio
TRACTOR-STRIP — Spatter preventive. Marquette Mfg. Co., Inc., Minneapolis, Minn.
TRACTRED—Turning rolls. Aronson Machine Co., Arcade, N. Y.
TRAKALOY—Hardfacing rods. Industrial Overlay Metals, Inc., Eaton, Ohio
TRAKTOROL—Machine for rebuilding tractor rolls and idlers. Wincar Welders, Long Beach, Calif.
TRANSITE—Asbestos-cement pipe. Johns-Manville, New York, N. Y.
TRANSPO—Metal and parts cleaner. Turco Products, Inc., Los Angeles, Calif.
TRAVEL-CUT—Wire straightening and cutting machine. The Lewis Machine Co., Cleveland, Ohio
TRAY-LIFT—Electric crane. Harnischfeger Corp., Milwaukee, Wis.
TRAVOGRAPH—Oxyacetylene cutting machine. Air Reduction Sales Co., New York, N. Y.
TRAVALOY—Hardfacing alloys. Industrial Overlay Metals, Eaton, Ohio
TRI-FLUX—Liquid soldering flux and liquid stainless steel flux. Wolfe Kote Co., Inc., Sheboygan, Wis.
TRI-IND-X—Inspection equipment, x-ray. Triplett & Barton, Inc., Burbank, Calif.
TRI-LINE—Welding hose. Burdett Oxygen Co., Cleveland, Ohio
TRINDL—A-c arc welders, torches, helmets, welding rods and accessories. Trindl Products, Ltd., Chicago, Ill.
TRIO-LITE—Lighters. Burdett Oxygen Co., Cleveland, Ohio
TRIPCO—Cutting tips for all torches. Trippe Supply Co., Baltimore, Md.
TRI-PHASE — Resistance welder. Taylor-Winfield Corp., Warren, Ohio
TRIPL-FLINT — Torch lighter. Modern Engineering Co., St. Louis, Mo.
TRIPLE-DUTY LENSES—Spatterproof cover lenses. Thermacote Co., Pasadena, Calif.
TRIPLETT & BARTON—X-ray and ultrasonic inspection equipment and numbering machines. Triplett & Barton, Inc., Burbank, Calif.
TRIPLOC—Cable connectors, plugs and receptacles. Pyle-National Co., Chicago, Ill.
TRIUMPH—Chains. Bridgeport Chain & Mfg. Co., The, Bridgeport, Conn.
TRODALOY—Electrode material for resistance welding. General Electric Co., patents by Ampco Metal, Inc., Milwaukee, Wis.; Electroloy Co., New York City; P. R. Mallory Co., Indianapolis, Ind.; Welding Sales and Engineering Co., Detroit, Mich.
TRUK-A-BOUT—Cylinder truck. C. W. Young Mfg. Corp., Syracuse, N. Y.
TRUMBULL—Switches and industrial control equipment. The Trumbull Electric Manufacturing Co., Plainville, Conn.
TRU-OHM—Ceramic welding nozzles. Tru-Ohm Products—Model Engineering & Mfg., Inc., Huntington, Ind.
TRI-2-RIP—Leather palm welding gloves. Montpelier Glove Co., Montpelier, Ind.
TUBE BORIUM—Hardfacing rods and electrodes. Steody Co., Whittier, Calif.
TUBE STOODITE—Hardfacing rods. Steody Co., Whittier, Calif.
TUBE-O-FLUX—Silver brazing alloy kits. American Products Corp., Chicago, Ill.
TUBE-TUNGSITE — Coarse granule carbide rod. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.
TUBE-TURN—Welding fittings and flanges. Tube Turns, Inc., Louisville, Ky.
TUC-AWAY—Spectacle type safety goggles. Watchemoket Optical Co., Inc., Providence, R. I.
TUC-OVER—Safety goggles. Watchemoket Optical Co., Inc., Providence, R. I.
TUF-COTE—Lens coating against pitting. Bausch & Lomb Optical Co., Rochester, N. Y.
TUF-CUT — Grinding wheels. Precision Grinding Wheel Co., Inc., Philadelphia, Pa.
TUF-TEX—Vinyl coated material. Frommelt Industries, Dubuque, Iowa
TUFANHARD—Hardfacing electrode. Hobart Brothers Co., Troy, Ohio
TUFBOY—Steel tape rule. Master Rule Mfg. Co., Middletown, N. Y.

TUFFALOY—Resistance welding alloys, projection welding dies, resistance welding electrodes, seam welding wheels. Tuffaloy Dept., Air Reduction Sales Co., Detroit, Mich.

TUFFLEX—Arc welding cable. Westinghouse Electric Corp., Pittsburgh, Pa.

TUFFLINE—Welding resistors, junction boxes, cable connectors, welders' inspection lamps and lights, plugs and receptacles, flood lights and spotlights, circuit-braker panels and stremer lights. C. H. Stevens & Co., Cornwall Bridge, Conn.

TUFF WELDER—Leather welding gloves. E. J. Streichert, Chicago, Ill.

TUFTON—Metallizing wire. Metallizing Co. of America, Chicago, Ill.

TUFWELD—Welding lenses and plates. Sellstrom Mfg. Co., Palatine, Ill.

TUKON—Hardness testers. Wilson Mechanical Instrument Co., Inc., New York City.

TU-LINE—Welding hose. Quaker Rubber Corp., Philadelphia, Pa.

TUMBLAST—Airless blast mill. Wheelabrator Corp., Mishawaka, Ind.

TUNG-ALLOY—High heat resisting electrode. The Resisto-Loy Co., Grand Rapids, Mich.

TUNG-METAL—Tungsten electrode. Mir-O-Col Alloy Co., Inc., Los Angeles, Calif.

TUNGROD—Fine granule carbide rod. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.

TUNGSTIDE—Hardfacing material. The Lockrey Co. Southampton, N. Y.

TUNGWELD—Hardfacing electrodes. Lincoln Electric Co., Cleveland, Ohio

TURBINAIR—Hoists. Joy Mfg. Co., Pittsburgh, Pa.

TURBO-JET—Metallizing gun. Metallizing Co. of America, Chicago, Ill.

TURCO CONSISTO-WELD—Preparation of aluminum alloys for spot welding. Turco Products, Inc., Los Angeles, Calif.

TURCO-SOLV—Electrical cleaning solvent. Turco Products, Inc., Los Angeles, Calif.

TURCO VULCO-ETCH—Preparation of aluminum for spot welding. Turco Products, Inc., Los Angeles, Calif.

TURNER—Blow torches, fire pots, soldering irons and bronze. Turner Brass Works, Sycamore, Ill.

TURRETYPE—Welding helmets and handshields. Dockson Corp., Detroit, Mich.

TUSCO—Walrus polishing leather. Greene, Tweed & Co., North Wales, Pa.

TWECO—Electrode holders, cable lugs, ground clamps, cable splicers, terminal and cable connectors. Tweco Products, Inc., Wichita, Kan.

TWECO-LITE — Aluminum welding cable. Tweco Products, Inc., Wichita, Kan.

TWECO-LUG—Welding cable lug. Tweco Products, Inc., Wichita, Kan.

TWECO-TONG—Welding electrode holders. Tweco Products, Inc., Wichita, Kan.

TWEEZER-WELD—Resistance welding controls and timers, welding tables and resistance welders. Federal Tool Engineering Co., Cedar Grove, N. J.

1200—Silver brazing flux. The American Platinum & Silver Div., Newark, N. J.

25-20 STAINLESS—Arc welding electrode. Metal & Thermit Corp., Rahway, N. J.

TWINARC—Two-wire attachment for Lincoln automatic welder. Lincoln Electric Co., Cleveland, Ohio

TWIN SPEC—Safety glasses. Zylo Ware Corp., Long Island City, N. Y.

TWINWELD—Double hose molded into a single unit. Hewitt-Robins, Inc., Stamford, Conn.

TWO-TONE TH — Alloyed rod. Resisto-Loy Co., Grand Rapids, Mich.

TYGO WELD—Organic welding material in rod form. U. S. Stoneware Co., Tallmadge, Akron, Ohio

U

UCC—Welding products. Union Carbide Corp., New York, N. Y.

UDD—Tubing. United Wire & Supply Corp., Providence, R. I.

UP—Welding positioner. Harnischfeger Corp., Milwaukee, Wis.

U. S.—Welding, cutting, lead burning and carbon removing equipment, acetylene generators, preheating torches, accessories and supplies. Harris Calorific Co., Cleveland, Ohio

U. S.—Electric drills, grinders and buffers. The United States Electrical Tool Co., Cincinnati, Ohio

U. S.—Automatic welding torch. Harris Calorific Co., Cleveland, Ohio

USS—Steel products. United States Steel Corp., Pittsburgh, Pa.

U. S. S. A-R—Abrasion resisting steel. U. S. Steel Corp., Pittsburgh, Pa.

U. S. S. MX—Free-machining bessemer bar stock. U. S. Steel Corp., Pittsburgh, Pa.

U. S. S.—Stainless steel. U. S. Steel Corp., Pittsburgh, Pa.

U. S. S. CARILLOY—Alloy steel. U. S. Steel Corp., Pittsburgh, Pa.

U. S. S. COR-TEN—High strength steel. U. S. Steel Corp., Pittsburgh, Pa.

U. S. S. MAN-TEN—High strength steel. U. S. Steel Corp., Pittsburgh, Pa.

U. S. S. SUPERKORE—Alloy steey. U. S. Steel Corp., Pittsburgh, Pa.

U. S. S VITRENAMEL—Enameling grade steel. U. S. Steel Corp., Pittsburgh, Pa.

U. S. S. TENNESSEE—Bars, plates and shapes, Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.

U. S. S. TRITEN—High strength steels. U. S. Steel Supply, New York, N. Y.

UW—Underwater electrode for welding. Pacific Welding Alloys Mfg. Co., Los Angeles, Calif.

ULTRA-FLEX—Hand grinder. Metal Removal Co., Chicago 10, Ill.

ULTRA-GRAPH—Oxyacetylene torch guiding machine. Heath Engineering Co., Fort Collins, Colo.

ULTRA-SPEED—Multiple spot welder. Federal Machine and Welder Co., Warren, Ohio

UNEEK—Universal head mounting for automatic welding heads. Cecil C. Peck Co., Cleveland, Ohio

UNI-CRIMP—Wire terminal. H. B. Sherman Mfg. Co., Battle Creek, Mich.

UNIFLEX—Welding cables. Uniflex Cable Div., Ypsilanti, Mich.

UNIGOGGLES—Goggles for welding, brazing and cutting. Jackson Products Air Reduction Sales Co., Warren, Mich.

UNION—Calcium carbide. Linde Co., New York, N. Y

UNIONARC—Semiautomatic equipment for CO_2-shielded, magnetic-flux welding. Linde Co., New York, N. Y.

UNIONMELT—Welding equipment for submerged-arc process. Linde Co., New York, N. Y.

UNIMATIC—Spot welder. Unitek Corp., Pasadena, Calif.

UNIMATIC—Mild steel electrode. Eutectic Welding Alloys Corp., Flushing, N. Y.

UNI-PULSE—Condenser discharge spot and seam welder. Federal Machine and Welder Co., Warren, Ohio

UNIQUE—Welding positioners and turning rolls. Unique Equipment, Inc., Brooklyn, N. Y.

UNISHEAR—Metal cutting, electric portable shears. Electric Tools Div., The Stanley Works, New Britain, Conn.

UNISTAGE—Air compressor. Schramm, Inc., West Chester, Pa.

UNITED—Portable fume exhausters. United Blower Co., Inc., New York, N. Y.

UNITED STATES GAUGE—Oxyacetylene gauge. United States Gauge Div., American Machine and Metals, Inc., Sellersville, Pa.

UNITED—Seamless tubing, drawn wire, aluminum welding alloys, aluminum, brass and copper tubing and integral finned tubing. United Wire & Supply Corp., Providence, R. I.

UNITEX—Fire brick. Quigley Co., Inc., New York, N. Y.

UNITEX—Small resistance welders. Unitek Corp., Pasadena, Calif.

UNIVERSAL—Machine for inserting and removing valves from compressed gas cylinders. Independent Engineering Co., O'Fallon, Ill.

UNIVERSAL—Welding torch. National Cylinder Gas Div., Chicago, Ill.

UNIVERSAL—Welding ground clamp. Mueller Electric Co., Cleveland, Ohio

UNIVERSAL—Girth welder. Morton Mfg. Co., Muskegon Heights, Mich.

UNIVERSAL — Oxyacetylene torch circle burner. Lenco, Inc., Jackson, Mo.

UNIVERSAL—Automatic welding fixture. The Lewis Welding & Engineering Corp., Bedford, Ohio

UNIVERSAL — Iron bender. Hossfeld Mfg. Co., Winona, Minn.

UNIVERSAL—Resistance welding machines and equipment. Universal Electric Sales Corp., Cleveland, Ohio

UNIVERSAL—Flame cutting machine. Vernon Tool Co., Ltd., Alhambra, Calif.

UNIVERSAL BALANCE—Welding positioners. Aronson Machine Co., Arcade, N. Y.

UNIVERSAL No. 1200—Silver brazing fluxes. The American Platinum & Silver Div., Newark, N. J.

UNIVERSAL PRESSURE — Welding and cutting torches. Harris Calorific Co., Cleveland, Ohio

UTILITY—Blast cleaner. Vacu-Blast Co., Inc., Belmont, Calif.

V

V MANGANICK—Moly manganese electrode in either coated or bare, coated d-c or a-c bare DC. Hobart Bros. Co., Troy, Ohio

V-MANG—Molybdenum — austenitic — manganese rod. American Manganese Steel Div., American Brake Shoe Co., Chicago Heights, Ill.

VACU-BLASTER—Dustless blast cleaning machine. Vacu-Blast Co., Inc., Belmont, Calif.

VACU-MASTER—Vacuum furnaces. C. I. Hayes, Inc., Cranston, R. I.

VALENCIA—Abrasive grain pumice. Whittaker, Clarke & Daniels, Inc., New York, N. Y.

VALVE-ALLOY—Impact resistant alloy. Resisto-Loy Co., Grand Rapids, Mich.

VAN-AIR—Compressed air dryer. Van Products Co., Erie, Pa.

VANCO—Percussive butt welders. The Taylor-Winfield Corp., Warren, Ohio

VANDE—Metallizing gun, air regulator and fitter, wire feeding machine, spray lathe and shaft repairing tool. Vande Manufacturing Co., Chicago, Ill.

VANGTRONIC—Stored energy weld panels and bench welders. Vangtronic Corp., Bridgeport, Conn.

VANO—Blowers. Coppus Engineering Corp., Worcester, Mass.

VANOL MODEL 700—Magnetic ground clamps. Vanol Corp., St. Louis, Mo.

VAPORARC—Electric welding equipment. National Cylinder Gas Div., Chicago, Ill.

VARI-LINE—Cable connectors. Burndy Engineering Co., New York, N. Y.

VARILUG—Terminal for welding cable. Burndy Engineering Co., New York, N. Y.

VELOCITY POWER—Cable splicer. Velocity Power Tool Co., Pittsburgh, Pa.

VENTA-MINE—Exhaust fans. Guyan Mach. Co., Logan, W. Va.

VENTAIR—Blowers. Coppus Engineering Corp., Worcester, Mass.

VENT-A-WELD—Welding table. Papec Machine Co., Shortsville, N. Y.

VERNIER-SET—Interval timers, Automatic Timing & Controls, Inc., King of Prussia, Pa.

VERNON—Pipe and flame-cutting equipment. Vernon Tool Co., Ltd., Alhambra, Calif.

VERSI-LINK—Connector. Burndy Engineering Co., New York, N. Y.

VERSI-TAP — Tee, splice or parallel connector. Burndy Engineering Co., Inc., New York, N. Y.

VERSON—Bending brakes, bending and trimming and stamping dies. Verson Allsteel Press Co., Chicago, Ill.

VERTEX—Arc welding electrode. Metal & Thermit Corp., Rahway, N. J.

VEVAC — Underwater jetting nozzle. Craftsweld Equipment Corp., Long Island City, N. Y.

VI-SPEED—Air operated vises and presses, and non-corrosive air cylinders. Van Products Co., Erie, Pa.

VICPHOSCO—Phosphor bronze electrodes. Victor Equipment Co., San Francisco, Calif.

VICSILCO—Silicon bronze electrodes. Victor Equipment Co., San Francisco, Calif.

VIC-EASY—Method for joining light wall pipe. Victaulic Co. of America, Elizabeth, N. J.

VIC-GROOVER—Tools for grooving pipe. Victaulic Co. of America, Elizabeth, N. J.

VICTAULIC—Pipe couplings and fittings. Victaulic Co. of America, Elizabeth, N. J.

VICTOR—Welding and cutting torches, pressure reducing regulators, flowmeters, acetylene gas generators, cylinder manifolds, welding rods and electrodes, fluxes, electrode holders and accessories and supplies. Victor Equipment Co., San Francisco, Calif.

VICTOR TUNGSMOOTH—Hardfacing alloy rod. Victor Equipment Co., San Francisco, Calif.

VICTOR WELD—Mild steel welding electrodes. Victor Equipment Co., San Francisco, Calif.

VICTORALLOY—Hardfacing rod. Victor Equipment Co., San Francisco, Calif.

VICTORITE—Hardfacing alloy rod. Victor Equipment Co., San Francisco, Calif.

VICTORY POINTS—Grinding wheels. Simonds Abrasive Co., Philadelphia, Pa.

VICTROMETER—A flowmeter for pressure regulators. Victor Equipment Co., San Francisco, Calif.

VIKING—Arc welders, economy spot welders, and air valves. Mid-States Welder Mfg. Co., Chicago, Ill.

VISARC—Translucent nozzles for Tig welding. Tec Torch Co., Inc., Carlstadt, N. J.

VISE-GRIP—Welding clamps and wrenches. Petersen Manufacturing Co., Inc., De Witt, Neb.

VISEPRESS—Combination hydraulic vise and press. Studebaker Machine Co., Chicago, Ill.

VISE WRENCH—Quick-acting toggle type wrench. Lapeer Mfg. Co., Detroit, Mich.

VISOR-TUC—Spectacles. Watchemoket Optical Co., Inc., Providence, Rhode Island

VISUWELD—Water-cooled torches for Tig welding. Tec Torch Co., Inc., Carlstadt, N. J.

VITALIZER—Filter-lubricator. Norgren Co., C. A., Englewood, Colo.

VOCO—Acetylene and oxygen. Valley Oxygen Co., Bay City, Mich.

VOGEL—Cut-off machine for tubing. Vogel Tool & Die Corp., Melrose Park, Ill.

VOLZ—Plate lifting clamp. Merrill Bros., Inc., Maspeth, N. Y.

VON ARX—Cleaning and descaling air gun. The Marindus Co., New York, N. Y.

VULCAN—Electrode holders. The Fibre-Metal Products Co., Chester, Pa.

VULCANITE—Grinding wheels and centerless regulating wheels. U. S. Rubber Co., Fort Wayne, Ind.

VULCAN—Electric soldering irons, melting pots for solder, glue, waxes and compounds and electric heaters. Vulcan Electric Co., Danvers, Mass.

VULCAN—Clamps, lathe dogs, chain pipe tongs and vises, hoist hooks, eye bolts. J. H. Williams & Co., Buffalo, N. Y.

VULCAN—LPGas—air torches, tips, etc. Purity Cylinder Gases, Inc., Grand Rapids, Mich.

VULCOID—Material used in the head harness of welder's helmets. Sellstrom Mfg. Co., Palatine, Ill.

VYCOR BRAND—Heat resisting glass. Corning Glass Works, Corning, N. Y.

W

WB—Weldbrazing alloys and fluxes. Uniworld Research Corp. of America, Cleveland, Ohio

W-40—Sponge iron powder for electrode coatings. Hoeganaes Sponge Iron Corp., Riverton, N. J.

W BOROLON—Grinding wheels. Simonds Abrasive Co., Philadelphia, Pa.

WGP—Fluxes. Welding Gas Products Co., Chattanooga, Tenn.

W. K. S.—Cylinder truck. Pioneer Welding Mfg. Co., Kalamazoo, Mich.

WMF—All purpose clamp. Research Engineering & Sales Co., Rochester, N. Y.

W. O. NO. 1—Rust remover. Turco Products, Inc., Los Angeles, Calif.

WW—Resistance welding alloys, holders and electrodes. WW Alloys, Inc., Detroit, Mich.
WAITCUS—Spot welder. The Central Sales Corp., Chicago, Ill.
W-AL-CO—Welding fluxes, welding lenses and goggles. Welding Alloys Mfg. Co., Elizabeth, N. J.
WALLACE—Bending machines. Wallace Supplies Mfg. Co., Chicago, Ill.
WALL-X—Hardfacing alloy rod and powder. Wall Colmonoy Corp., Detroit, Mich.
WALLOY NO. 6—Chrome-cobalt-tungsten hardfacing alloy. Wall Colmonoy Corp., Detroit, Mich.
WALLTITE—Blast burner. Eclipse Fuel Engineering Co., Rockford, Ill.
WALMANG—Manganese-nickel steel welding rod. Wall Colmonoy Corp., Detroit, Mich.
WALSEAL—Valves, fittings and flanges. Walworth Co., New York, N. Y.
WALWORTH—Valves, fittings and pipe wrenches. Walworth Co., New York, N. Y.
WARCO—Mechanical presses. The Federal Machine & Welders Co., Warren, Ohio
WARDEN—Shut off valve. Security Valve Co., Glendale, Calif.
WARRIOR—Lightweight pedestal for automatic welding. Cayuga Machine & Fabricating Co., Inc., Depew-Buffalo, N. Y.
WARREN ALLOY—Bending and stamping dies, jigs and fixtures. Warren Alloy, Pontiac, Mich.
WASP—D-c arc welder. Air Reduction Sales Co., New York, N. Y.
WATER MIZER—Water saving unit for resistance welders. Van Vooren Products, East Moline, Ill.
WAUKEE—Flo-meters, gas and air mixers. Waukee Engineering Co., Inc., Milwaukee, Wis.
WAYNE—Soldering flux. Wayne Chemical Products Co., Detroit, Mich.
WEAR-ARC—Hardfacing electrodes. Alloy Rods Co., York, Pa.
WEAR DEVIL—Hardfacing electrodes. Champion Rivet Co., Cleveland, Ohio.
WEARALOY—Cast alloy rods. Wearaloy Co., Los Angeles, Calif.
WEAR-CRAFT—Manganese-nickel electrodes. Allied Weldcraft, Inc., Indianapolis, Ind.
WEAR-EX—Alloy steel applicator bar. Pyramid Steel Co., Cleveland, Ohio
WEAR-FLAME—Hardfacing rods. Alloy Rods Co., York, Pa.
WEAR-O-MATIC—Wire feed unit for semiautomatic hardfacing. Alloy Rods Co., York, Pa.
WEAR-O-MATIC—Coiled hardfacing wire. Drawalloy Corp., York, Pa.
WEAR-SHARP—Patented corrugated dipper tooth repointer. American Manganese Steel Div., American Brake Shoe Co., Chicago, Ill.
WEARWELD—Hardfacing electrode. Lincoln Electric Co., Cleveland, Ohio
WEBB—Plate bending rolls. The Webb Corp., Webb City, Mo.
WEDGE-GRIP—Wire connector. H. B. Sherman Mfg. Co., Battle Creek, Mich.
WEGEWELL—Bronze welding rods. Titan Metal Mfg. Co., Bellefonte, Pa.
WELCO—Oxygen and acetylene. Welding Gas Products Co., Chattanooga, Tenn.
WELCO—Safety goggles and face shields of all types. Welsh Mfg. Co., Providence, R. I.
WELDALUMINITE—Anti-porosity compound. Special Chemicals Corp., Ossining, N. Y.
WELD-AID—Insert for arc welders wearing bifocals. Willson Products, Inc., Reading, Pa.
WELD-AIR-MATIC—Automatic air conversion unit for spot welders. Robt. W. Hoffman Co., Chicago, Ill.
WELDAFLUX—Flux. Tip Top Electric Products Co., New York 18, N. Y.
WELDALL—Spot-welding pliers. Tip Top Electric Products Co., New York 18, N. Y.
WELD-ALLOY—Hard solder. Tip Top Electric Products Co., New York 18, N. Y.
WELDALOY—Spot welding tips, wheels, holders, bar stock alloys and castings. Weldaloy Mfg. Co., Detroit, Mich.
WELDANPOWER—Welder-power unit. Lincoln Electric Co., Cleveland, Ohio
WELDBRAZING—Stainless-steel fluxes and welding rods. Uniworld Research Corp. of America, Cleveland, Ohio
WELDCO—Arc welding electrodes, arc welders and accessories. Welding Service Sales, Inc., San Francisco, Calif.
WELD-CRAFT—Hardfacing electrodes. Allied Weldcraft, Inc., Indianapolis, Ind.
WELDER SPECIAL—Horsehide split welding gloves. E. J. Streichert, Chicago, Ill.
WELD-CUT-PAL KIT—Welding and cutting outfits. Burdett Oxygen Co., Cleveland, Ohio
WELDELL—Forged steel pipe fittings. Taylor Forge and Pipe Works, Chicago, Ill.
WELDERS ELGIN—Welding rods. Borm Manufacturing Co., Elgin, Ill.
WELDER'S EYE EASE—Eye lotion. Detroit First Aid Co., Detroit, Mich.
WELDER'S EYE LOTION—Eye lotion. Ashton's Pharmacist, Youngstown, Ohio
WELDERS GROUND—"C" clamps. Grand Specialties Co., Chicago, Ill.
WELDER'S MOULDING COMPOUND—Carbon compound. Harris Calorific Co., Cleveland, Ohio
WELDER'S PAL—Eye drops. Carhoff Co., Cleveland, Ohio
WELDEX—Resistance welding machines, transformers and accessories. Weldex Inc., Detroit, Mich.
WELD-FAST—Bronze welding rods. Revere Copper and Brass, Inc., New York, N. Y.
WELDIT—Welding and cutting torches, supplies, accessories, etc. Weldit, Inc., Detroit, Mich. Co., Detroit, Mich.
WELDIMATIC—Welding and heating torches. Weldit, Inc., Detroit, Mich.
WELDITE—Electrodes and welding rods. Chicago Steel and Wire Co., Chicago, Ill.
WELDITE—Welding lens. Sellstrom Mfg. Co., Palatine, Ill.
WELDMASK—Compound. Turco Products, Inc., Los Angeles, Calif.
WELDMASTER—Clamps. Wetzler Clamp Co., Long Island City, N. Y.
WELDMASTER—Precision resistance welder. Unitek Corp., Pasadena, Cal.
WELDMASTER—Welding torches. Modern Engineering Co., St. Louis, Mo.
WELDMATIC—Precision resistance welder. Unitek Corp., Pasadena, Cal.
WELDMOBILE—Self-propelled arc welder. Hobart Bros. Co., Troy, Ohio
WELDMORE—Carbon arc welding electrode. Lincoln Electric Co., Cleveland, Ohio
WELDMORE—Welding positioners, jigs & fixtures and turning rolls. Pandjiris Weldment Co., St. Louis, Mo.
WELD-O-VENT—Welding fume exhauster. Engwald Corp., Long Island, N. Y.
WELDOLETS—Welding fittings. Bonney Forge and Tool Works. Allentown, Pa.
WELDOMATIC—Automatic arc welding head, control and machines. Westinghouse Electric Corp., Buffalo, N. Y.
WELD-O-TROL—Electronic controls, seam and spot welding contactors. Westinghouse Electric Corp., Buffalo, N. Y.
WELDPOWER—A. C. and stored energy resistance welders and controls. Raytheon Mfg. Co., Waltham, Mass.
WELD PROBER—Weld testing and sampling machine. The Fibre-Metal Products Co., Chester, Pa.
WELDRAWN—Welded and cold drawn tubing in stainless steels, nickel and nickel alloys and beryllium copper. Superior Tube Co., Norristown, Pa.
WELDREEL—Welding hose reel. United Specialty Corp., El Dorado, Ark.
WELDRITE POROSEAL—Compound. Electric Welding Machine Co., Detroit, Mich.
WELDRITE—Seam, arc spot and butt electric welding machines. Electric Welding Machine Co., Detroit, Mich.
WELDSAFE—Welding lenses. Sellstrom Mfg. Co., Palatine, Ill.
WELDSTEEL—Utility pipe and bar clamp. Grand Specialties Corp., Chicago, Ill.
WELD-TEX—Glass cloth fabric. Frommelt Industries, Dubuque, Iowa
WELDTRONARC—DC arc welder, fusion welder control. Weldtronic Co., Detroit, Mich.
WELD-X—Spatter preventative. Kelite Products Inc., Los Angeles, Calif.
WELLS—Metal cutting band sawing machines. Wells Mfg. Corp., Three Rivers, Mich.
WELLS-O-BAR—Bar feed for small horizontal metal cutting band sawing machines. Wells Manufacturing Corp., Three Rivers, Mich.
WELSHARD—Cover, glass and goggle lenses. Welsh Manufacturing Co., Providence, R. I.
WELSH-GUARD—Lightweight goggles. Welsh Mfg. Co., Providence, R. I.
WELSHWELD—Goggles, helmets, and lenses for same. Welsh Mfg. Co., Providence, R. I.
WELTRONIC—Electronic controls. Weltronic Co., Detroit, Mich.
WEMCO—LP gas salamander, tar kettle burner, and super flaming torch. Wemco Products, Hazel Park, Mich.
WEN-LYN—Pneumatic, chipping and scaling hammer. Wen-Lyn Products, Burbank, Calif.
WESTON—Current measuring instruments, pyrometers and general purpose relays. Weston Elec. Instrument Co., Newark, N. J.
WESTOIL—Non acid flux. Farrelloy Co. Philadelphia, Pa.
WESTINGHOUSE—Electric arc welding equipment. Westinghouse Electric Corp., Pittsburgh, Pa.
WETOIL—Non-acid flux. Farrelloy Co., Philadelphia, Pa.
WETZLER—Adjustable clamps. Wetzler Clamp Co., Long Island City, N. Y.
WHARTON—Gas cylinders for oxygen, hydrogen, etc. Taylor-Wharton Iron and Steel Co., Easton, Pa.
WHEELABRATOR—Airless abrasive blast cleaning equipment and steel shot abrasive. Wheelabrator Corp., Mishawaka, Ind.
WHEELER—Plow points. Star Mfg. Co., Division of Illinois Iron & Bolt Co., Carpentersville, Ill.
WHEELRITE—Cylinder trucks. Weldrite Co., Inc., Long Island, N. Y.
WHIPPET—Electric hoist. Ford Chain Block Div. of Amer. Chain & Cable Co., Inc., New York, N. Y.
WHIRLWIND—Wire wheel brushes. The Black & Decker Mfg. Co., Towson, Md.
WHITE CHIEF—Steel tape rule. Carlson Rules & Measures, Monrovia, Calif.
WHITE FLASH—Shielded arc electrodes. Central Steel and Wire Co., Chicago, Ill.
WHITE FLUX COATED 18-8 STAINLESS STEEL—Steel Sales Corp., Chicago, Ill.
WHITELIGHT—Aluminum welding and brazing alloys. Whitelight Wire & Supply, Brooklyn, N. Y.
WHITNEY—Lever punches, riveting and setting hammers, and bench and hydraulic punches. W. A. Whitney Mfg. Co., Rockford, Ill.
WILDCAT—Portable arc welder. Radson Engineering Corp., Macon, Ill.
WIESE WORLD BRAND—Cultivator shovels and sweeps. Wiese Plow Welding Co., Perry, Iowa
WILLSON—Goggles, respirators, gas masks, welding helmets, shields, etc. Willson Products, Inc., Reading, Pa.
WILLSONITE—Tinted glass for flash goggles. Willson Products, Inc., Reading, Pa.
WILLSON-WELD—Filter glass Willson Products, Inc., Reading, Pa.
WILMINGTON FIBRE—Vulcanized fibres available in sheets, rods, tubes and shapes, such as electrode holder handles, knobs, washers, shims, etc. Wilmington Fibre Specialty Co., New Castle, Wilmington, Del.
WILTON—Vises and C clamps. Wilton Tool Manufacturing Co., Schiller Park, Ill.
WINGFOOT—Corrugated welding hose. Goodyear Tire and Rubber Co., Inc., Akron, Ohio
WINTERIZERS—Washable helmet liners for cold weather. Jackson Products, Air Reduction Sales Co., Warren, Mich.
WISCONSIN—Air-cooled engines. Wisconsin Motor Corp., Milwaukee, Wis.
WISSCO—Gas and electric welding wire. Wickwire Spencer Steel Div., New York, N. Y.
WITT—Welding gas pressure gages. Witt Gauge Co., Skokie, Ill.
WIX—Welding gloves. Wickman Glove Co., Berkley, Calif.
WIZARD JR.—Chrome-clad tape-rules. The Lufkin Rule Co., Saginaw, Mich.
WOERNER—Tubular profile cutter. Nickelson Tool & Die Co., Inc., Wichita, Kans.
WONDERFLUX—Silver brazing flux. American Silver Co., Inc., Flushing, N. Y.
WORK SHOP KIT—Welding outfits. Burdett Oxygen Co., Cleveland, Ohio
WORTHINGTON—Turning rolls, head manipulators and positioners. Worthington Corp., Plainfield, N. J.
WOVEN-GARD—Mitts, handspats, gloves, arm guards. Industrial Glove Corp., Danville, Ill.
WRIGHT—Hoists and cranes. Wright Hoist Div. of Amer. Chain & Cable Co., Inc., York, Pa.
WYCO—Flexible shafts, flexible shaft grinders, buffers, machines, speed saws & grinding wheels. Wyzenbeek & Staff, Inc., Chicago, Ill.
WYPO—Welding and cutting torch tip cleaners. Maitlen & Benson, Inc., Long Beach, Calif.

X

X-7—Anti-spatter compound. Linde Co., New York, N. Y.
XX SPECIAL—Welding rods. K-G Equipment Co., Inc., Allentown, Pa.
XACTLITE—Temperature control. Claud S. Gordon Co., Chicago, Ill.
XCEL-FLUX—Welding and brazing compounds, kits, torch outfits and silver soldering paste. American Products Corp., Chicago, Ill.
XRAYOGRAPH—Flame-cutting machine. Air Reduction Sales Co., New York, N. Y.
XTRA-LITE—Plastic cover lens and plates. Sellstrom Mfg. Co., Palatine, Ill.
X-TRON 180—Portable X-ray unit. Mitchell Radiation Products Corp., Norristown, Pa.
XYRON—Improved consumable electrode for machinable welds on cast iron. Eutectic Welding Alloys Corp., Flushing, N. Y.

Y

YELLOW JACKET—Engine driven arc welder. Air Reduction Sales Co., New York, N. Y.
YELLOW-STRIPE—Aluminum oxide, papers and cloth. Clover Mfg. Co., Norwalk, Conn.
YOLOY—High strength low alloy steels. The Youngstown Sheet and Tube Co., Youngstown, Ohio
YORK—Tinning and boiler compounds. York Engineering Co., Chicago, Ill.
YORK'S No. 77—Brazing and welding flux. York Engineering Co., Chicago, Ill.

Z

ZB—Blast burner. Eclipse Fuel Engineering Co., Rockford, Ill.
Z NICKEL—Nickel heat treatable alloy. The International Nickel Co., New York, N. Y.
ZEPHER—Machine tool. DoAll Co., Des Plaines, Ill.
ZEPHER—Portable electric drills, sprayers, saws and sander-polishers. Portable Electric Tools, Inc., Chicago, Ill.
ZEPHYRWELD—Welding fittings. Tri-Clover Machine Co., Kenosha, Wis.
ZETLAN—Fire retardants. Wayne Chemical Products
ZEVA—Electric soldering tool. Paul C. Roche Co., Inc., New York 7, N. Y.
ZIG-ZAG—Burners. Gas Appliance Service Inc., Chicago, Ill.
ZINCILATE—Anti-Corrosive paint. Industrial Metal Protectives Inc., Dayton, Ohio
ZINCULLOY—Zinc-copper welding wire and rod. Whitelight Wire & Supply, Brooklyn, N. Y.
ZIP-LIFT—Electric hoist. Harnischfeger Corp., Milwaukee, Wis.
ZIP 24 AND 27—Iron-powder electrodes. Westinghouse Electric Corp., Pittsburgh, Pa.
ZIPPERETTE—A-c arc welders, Mid-States Welder Mfg. Co., Chicago, Ill.
ZIP SPOT—Portable spot welder. Mid-States Welder Mfg. Co., Chicago, Ill.
ZIRTUNG—Welding electrodes. Sylvania Electric Products, Inc., Towanda, Pa.
ZYGLO—Fluorescent inspection equipment and materials. Magnaflux Corp., Chicago, Ill.

NAMES AND ADDRESSES

IN this section are arranged alphabetically the names of manufacturers of welding equipment, tools and supplies whose products are listed in the Classified List, together with their addresses. Only one address is given for each company, that being its main or general sales office, or the one otherwise specified by the company —except where manufacturing activities are so divided between two or more plants of a company that certain lines are produced in one plant while others are made elsewhere and orders should be placed according to the plants in which they are manufactured.

Disregard individual's initials or the word "The" in locating the name of a manufacturer. The name of a company such as D. B. Gorbound & Co. would be listed "Gorbound, D. B., & Co." Where the prefix "The" is used, a company is listed as follows: "Morgan Co., The." Where initials form the main part of a name, as, for instance, "B. & R. Pipe Co." the names of such companies are grouped with others of a similar type at the start of listings appearing under the first initial. For instance. "B. & R. Pipe Co." would be found among the first few names appearing under "B."

For convenience, we have generally used "Co." instead of "Company" and "Corp." instead of "Corporation," regardless of whether the company or corporation spells out the word. Similarly, we use "Inc." uniformly instead of "Incorporated."

A

A & A Mfg. Co., 712 South 12th St., Milwaukee 4, Wis.
Abrasive Products, Inc., South Braintree 85, Mass.
Ace Drill Corp., 2600 E. Maumee, Adrian, Mich.
Acet-A-Tips Co., 5069 W. Madison St., Chicago 44, Ill.
Acetogen Gas Co., 20137 Sherwood Ave., Detroit 34, Mich.
Acetylene Gas Co., 3411 Pine Blvd., St. Louis 3, Mo.
Acetylene Service Co., 1105 Zuni St., Denver 4, Colo.
Acetylene Supply Co., 1900 E. Elizabeth Ave., Linden, N. J.
Acme Elec. Welder Co., 2618 Fruitland Ave., Los Angeles 58, Calif.
Acme Mfg. Co., 1400 E. Nine Mile Road, Detroit 20, Mich.
Acme Protection Equip. Co., 1275 Kalamazoo St., South Haven, Mich.
Acorn Iron and Supply Co., Delaware Ave. and Poplar St., Philadelphia 23, Pa.
Acoustica Associates, Inc., 26 Windsor Ave., Mineola, N. Y.
Acro Welder Mfg. Co., 1719 West St. Paul Ave., Milwaukee 3, Wis.
Acromark Co., 9-13 Morrell St., Elizabeth 4, N. J.
Actarc Inc., 5806 Hough Ave., Cleveland 3, Ohio
Adair, Robin W. Co., Inc., Avoca, N. Y.
Adams Alloy Company, P. O. Box 286, Wakita, Okla.
Adams Welded Products Co., Inc., 5656 Bankfield Ave., Culver City, Calif.
Adjustable Clamp Co., 426 North Ashland Ave., Chicago 22, Ill.
Adler Mfg. Co., 5085 N. Broadway, Chicago 40, Ill.
Advance Glove Mfg. Co., 901 W. Lafayette St., Detroit 26, Mich.
Advanced Vacuum Prods., Inc., Div. General Ceramics Corp., 18-22 Liberty St., Stamford, Conn.
Aeroprojects, Inc., 310 E. Rosedale Ave., West Chester, Pa.
Aetna Cylinders, Inc., 19345 John R St., Detroit 3, Mich.
Aget—Detroit Co., Ann Arbor, Mich.
Agnew Machine Co., 125 S. Main St., Milford, Mich.
Air Controls, Inc., 2310 Superior Ave., Cleveland 14, Ohio
Air Equipment Corp., 1355 Michigan St., N.E., Grand Rapids, Mich.
Air Filter Corp., 4554 W. Woolworth Ave., Milwaukee 18, Wis.
Air Products, Inc., P.O. Box 538, Allentown, Pa.
Air Reduction Sales Co., Div., Air Reduction Co., Inc. 150 E. 42nd St., New York 17, N. Y.
Aircraft Standard Parts Co., 41 S. 6th St., Newark 7, N. J.
Airline Welding & Engineering, 785 N. Prairie Ave., Hawthorne, Calif.
Airtherm Mfg. Co., 700 S. Spring Ave., St. Louis 10, Mo.
Ajax Elec. Co., Inc., 996 Frankford Ave., Philadelphia, Pa.
Ajax Electrothermic Corp., Ajax Park, Trenton 5, N. J.
Alabama Oxygen Co., 2028 Vanderbilt Rd., Birmingham, Ala.
Aladdin Mfg. Co., 3125 Harrison, Kansas City, Mo.
Aladdin Rod & Flux Mfg. Co., 1300 Burton St., S. E., Grand Rapids 7, Mich.
Alaska Oxygen Co., Box 351, Fairbanks, Alaska.
Albertson Co., 3100 Lowell Ave., Sioux City 2, Iowa
Alcar Instruments, Inc., Div. of Eastern Electrosonic Industries Corp., 595 Madison Ave., New York 22, N. Y.
Aldan Oxygen Mfg. Co., Inc., Oak Lane & B&O Railroad, Collingdale, Del. Co., Pa.
Alemite Div., Stewart-Warner Corp., 1826 Diversey Pkwy., Chicago 14, Ill.
Alfco Laboratories, 2415 W. Belmont Ave., Chicago 18, Ill.
Aljay Mfg. Co., Inc., 1516 Callowhil St., Philadelphia 30, Pa.
Allegheny Ludlum Steel Corp., H. W. Oliver Bldg., Pittsburgh 22, Pa.
Allen Co., L. B., 9314 W. Berenice, Schiller Park, Ill.
Allen Electric & Equipment Co., 2101 N. Pitcher St., Kalamazoo, Mich.
Allen Mfg. Co., W. D., 566 W. Lake St., Chicago, Ill.
Allied Prod. Co., 1133 Newport Ave., Chicago 13, Ill.
Allied Steel & Tractor Prod. Corp., 7835 Broadway, Cleveland 5, Ohio
Allied Weld-Craft, Inc., 401 W. South St., Indianapolis 25, Ind.
Allied Welder Corp., 8700 Brandt, Dearborn, Mich.
Allis-Chalmers Mfg. Co., Milwaukee 1, Wis.
Allison-Campbell Div., American Chain & Cable Co., 922-5 Connecticut Ave., Bridgeport 2, Conn.
Allmand Bros. Mfg. Co., 1315 4th Ave., Holdrege, Nebr.
Alloy Metal Wire Div., H. K. Porter Co., Inc., Prospect Park, Pa.
Alloy Ring Service, 1095 E. 52nd St., Indianapolis 5, Indiana
Alloy Rods Co., Lincoln Highway, West, York, Pa.
Alloy Specialties Co., 2441 Waverly Ave., Swissvale, Pa.
Alloy Sprayer Co., 602 First Natl. Bk. Bldg., Ann Arbor, Mich.
All-State Welding Alloys Co., Inc., 249-55 Ferris Ave., White Plains, N. Y.
Alpha-Loy Corp., Div. of Alpha Metals, Inc., 2250 S. Lumber St., Chicago, Ill.
Alpha Metals, Inc., 56 Water St., Jersey City 4, N. J.
Alphil Spot Welder Mfg. Corp., 1058 Pacific St., Brooklyn 38, N. Y.
Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa.
Aluminum Wire Prod. Co., Inc., 9 Nasbuc Ave., Glastonbury, Conn.
Alva Allen Industries, Clinton, Mo.
Alwarth Chemical Corp., 366 Madison Ave., New York, N. Y.
Amalgamated Industrial Corp., 421 Memphis St., Philadelphia 25, Pa.
American Agile Corp., P.O. Box 168, Bedford, Ohio
American Allsafe Co., Inc., 1245 Niagara St., Buffalo 13, N. Y.
American Arc Welders, Inc., Roseau, Minn.
American Blower Corp., Div. of American-Standard, 8111 Tireman Ave., Detroit 32, Mich.
American Brass Co., The, American Metal Hose Branch, 698 So. Main St., Waterbury 20, Conn.
American Brass Co., The, 414 Meadow St., Waterbury 20, Conn.
American Brazing Alloys Co., P. O. Box 11, Pelham, N. Y.
American Cable Div. of American Chain & Cable Co., Inc., 271 S. Pennsylvania Ave., Wilkes-Barre, Pa.
American Carbide & Chem. Corp., 3411 Pine St., St. Louis 3, Mo.
American Chain Div. of American Chain & Cable Co., Inc., York, Pa.
American Compressed Gas Products, Inc., 5300 S. Hanna St., Ft. Wayne 5, Ind.
American Crayon Co., The, 1706 Hayes Ave., Sandusky, Ohio.
American Cyanamid Co., 30 Rockefeller Plaza, New York 20, N. Y.
American Diamond Saw Co., 519 N. W. Park Ave., Portland 9, Ore.
American Elec. Fusion Corp., 2600 Diversey Blvd., Chicago 47, Ill.
American Fork & Hoe Co., 1623 Euclid Ave., Cleveland 15, Ohio.
American Gas & Chemical Co., 111 S. 4th St., Harrison, N. J.
American Handle Co., P.O. Box 185, Jonesboro, Ark.
American Industrial Safety Equip. Co., 3560 Lakeside Ave., Cleveland 14, Ohio.
American LaFrance Corp., 100 E. La France St., Elmira, N. Y.
American Lithium Institute, Inc., P.O. Box 549, Princeton, N. J.
American Machinery & Foundry Co., 261 Madison Ave., New York 16, N. Y.
American Magnesium Corp., 2210 Harvard St., Cleveland 5, Ohio.
American Manganese Steel Div., American Brake Shoe Co., 389 E. 14th St., Chicago Heights, Ill.
American Messer Corp., 405 Lexington Ave., New York 17, N. Y.
Anaconda Metal Hose Div., American Brass Co., 698 S. Main St., Waterbury 88, Conn.
American Metal Products Co., 133 Southbridge St., Auburn, Mass.
American Nickeloid Co., 1501 2nd St., Peru 7, Ill.
American Optical Co., 3 Mechanic St., Southbridge, Mass.
American Oxygen Service Corp., 600 Essex St., Harrison, N. J.
American Pamcor, Inc., 181 Hillcrest Ave., Havertown, Pa.
American Photo Copy Equip. Co., 2849 N. Clark St., Chicago 14, Ill.
American Pipe & Steel Corp., 2201 Commonwealth, Alhambra, Calif.
American Pipe Tool Co., 4856 W. Kinzie St., Chicago 44, Ill.
American Platinum & Silver Division, Englehard Industries, Inc., 113 Astor St., Newark, N. J.
American Products Corp., 525 South Dearborn St., Chicago 5, Ill.
American Pullmax Co., Inc., 2485 N. Sheffield Ave., Chicago 14, Ill.
American Pulverizer Co., 1249 Macklind Ave., St. Louis 10, Mo.
American Sand Banum Co., Inc., 9 Rockefeller Plaza, New York 20, N. Y.
American Scale Co., 919 Baltimore Ave., Kansas City 6, Mo.
American Silver Co., Inc., 36-07 Prince St., Flushing 54, N. Y.
American Smelting & Refining Co., Federated Metals Div., 120 Broadway, New York 5, N. Y.
American Society for Abrasives, 222 Berks County Trust Bldg., Reading, Pa.
American Solder & Flux Co., 19th & Willard Sts., Philadelphia 40, Pa.
American Stamping Co., 310 E. Burnham St., Battle Creek, Mich.
American Steel & Wire Co., Rockefeller Bldg., 614 Superior Ave., N. W., Cleveland 13, Ohio.
American Transformer Co., 178 Emmet St., Newark 5, N. J.
American Vacuum Co., 8100 Ridgeway, Skokie, Ill.
American Ventilating Hose Co., 100 Park Ave., New York 17, N. Y.
American Welding Alloys Corp., 124—57th St., Brooklyn 20, N. Y.
American Welding & Mfg. Co., Warren, Ohio.
American Welding Society, 33 W. 39th St., New York 18, N. Y.
Ames, B. C. Co., 26 Ames St., Waltham 54, Mass.
Ames Spot Welder Co., Inc., 1328 58th St., Brooklyn 19, N. Y.
Ampco Metal, Inc., 1701 S. 38th St., Milwaukee 46, Wis.
Amperex Electronic Corp., 230 Duffy Ave., Hicksville, L. I., N. Y.
Ampower Products Co., 5737 W. 87th St., Oak Lawn, Ill.
Amsco Div.—See American Manganese Steel Div.
Anaconda Wire & Cable Co., 25 Broadway, New York 4, N. Y.
Anchor Machine & Tool Co., Jackson, Mich.
Anchor Metal Co., 966 Meeker Ave., Brooklyn 22, N. Y.
Andco, Inc., Orchard Park, N. Y.
Anderson Corp., 1039 Southbridge St., Worcester 3, Mass.
Anderson, Albert & J. M., Mfg. Co., 289 A St., Boston 10, Mass.
Andrew King, 67 E. Lancaster Ave., Ardmore, Penn.
Angle Steel Equip. Co., Inc., Elm St., Plainwell, Mich.
Anker Holth Mfg. Co., 2723 Conner St., Port Huron, Mich.

Ansco, Div. of General Aniline & Film Corp., Binghamton, N. Y.
Ansul Chemical Co., Fire Extinguisher Division, 1 Stanton St., Marinette, Wis.
Anthony, F. M., Co., 773 University Ave., Berkeley 2, Calif.
Anti-Borax Compound Co., Inc., 1506 Wall St., Ft. Wayne 9, Ind.
Anzick Mfg. Co., 23675 Mound Rd., Warren, Mich.
Apollo Steel Co., Oliver Bldg., Pittsburgh, Pa.
Appleton Electric Co., 1701-1759 Wellington St., Chicago 13, Ill.
Aqua Electric Scale Control, Inc., 2026 E. 22nd St., Cleveland 15, Ohio.
Arcair Co., 427 S. Mt. Pleasant Ave., Lancaster, Ohio.
Archer, Inc., Fred C., 4905 N. 31st St., Milwaukee 9, Wis.
Arcos Corp., 1500 South 50th St., Philadelphia 43, Pa.
Argopen Co., 207 Allen Rd., N. Syracuse 12, N. Y.
Armco Steel Corp., 703 Curtis St., Middletown, Ohio.
Armglo Co., 3618 W. Pierce St., Milwaukee 4, Wis.
Armite Laboratories, 6609 Broad St., Los Angeles 1, Calif.
Armor-Tuf Sales Corp., 299 Madison Ave., New York, N. Y.
Armour & Co., Armour Alliance Industries, N. Benton Rd., Alliance, Ohio
Armstrong-Blum Mfg. Co., 5700 W. Bloomingdale Ave., Chicago 39, Ill.
Armstrong Bros. Tool Co., 5200 W. Armstrong Ave., Chicago 46, Ill.
Armstrong Cork Co., Building Material Div., Liberty St., Lancaster, Pa.
Arnold Serton, Inc., 10 Rockefeller Plaza, New York 20, N. Y.
Aro Equipment Corp., Enterprise & Trevitt Sts., Bryan, Ohio.
Aro Spot Welders, Div. of Guthery Machine Tool Corp., 38-31 Crescent St., Long Island City 1, N. Y.
Aronson Machine Co., 1001 W. Main St., Box 317, Arcade, N. Y.
Arrow Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn.
ASEA Electric Co., 500 Fifth Ave., New York 36, N. Y.
Ashton's Phamacist, 2724 Mahoning Ave., Youngstown 9, Ohio.
Associated Bag & Apron Co., 2650 W. Belden Ave., Chicago 47, Ill.
Associated Business Counselors, P.O. Box 112, Skokie, Ill.
Associated Research, Inc., 3758 W. Belmont Ave., Chicago 18, Ill.
Athol Machine & Foundry Co., 82 Southington St., Athol, Mass.
Atkins E. C. & Co., 402 S. Illinois St., Indianapolis 9, Ind.
Atkomatic Valve Co., 545 Abbott St., Indianapolis 25, Ind.
Atlantic Abrasive Corp., 540 Pearl St., South Braintree 85, Mass.
Atlas Abrasive Corp., 459 12th St., Brooklyn 15, N. Y.
Atlas Press Co., 1915 N. Pitcher St., Kalamazoo, Mich.
Atlas Welding Accessories, Inc., 707 East Lewiston Ave., Ferndale 20, Mich.
Atlas Welding & Mfg. Co., 2200 W. Pacific Coast Hwy., Long Beach 10, Calif.
Atrax Co., The, 240 Day St., Newington 11, Conn.
Auffhauser Bros. Corp., 830 Willis Ave., Albertson, N. Y.
Aurora Equipment Co., Equito Div., Aurora, Ill.
Auto Arc-Weld Mfg. Co., 9615 Meech Ave., Cleveland 5, Ohio.
Automatic Gas Flux Co., Public Square Bldg., Cleveland 13, Ohio.
Automatic Switch Co., 50-56 Hanover Rd., Florham Park, N. J.
Automatic Timing & Controls, Inc., King of Prussia, Pa.
Automatic Welding Co., P.O. Box 3133, Tulsa, Okla.
Automatic Welding Co., Airport Rd., Box 331, Waukesha, Wis.
Automatic Welding Machinery Ass'n, 1010 Euclid Bldg., Cleveland, Ohio.
Automation Machines & Equipment Co., Inc., 3125 W. Mill Rd., Milwaukee 9, Wisc.
Ayres Pipe Marker, P.O. Box 572, Wilmington, Calif.

B

BMC Mfg. Corp., 5-9 Griswold St., Binghamton, N. Y.
Babcock & Wilcox Co., The, 161 E. 42nd St., New York 17, N. Y.
Babcock & Wilcox Co., The, Tubular Prods. Div., Beaver Falls, Pa.
Baker Bros., Inc., Post & Harlean Sts., Toledo, Ohio.
Baker Co., Inc., The, Maplewood, Maine.
Balbach Co., The, 1201 California St., Omaha, Neb.
Baldor Electric Co., 4353 Duncan Ave., St. Louis 8, Mo.
Baldwin-Lima-Hamilton Corp., Chester Park, Simpson, & Eddystone, Philadelphia 42, Pa.
Balmar, Franklin, Corp., Woodberry, Baltimore 11, Md.
Balteau Electric Corp., 5-9 New St., P. O. Box 385, Stamford, Conn.
Banner Mfg. Co., 6820 N. 43rd St., Milwaukee 9, Wis.
Barksdale Valves, 5125 Alcoa Ave., Los Angeles 58, Calif.
Barnebey-Cheney Co., Cassady at 8th Ave., Columbus, Ohio.
Bar-Ray Prods., Inc., 209 25th St., Brooklyn 32, N. Y.
Barnes, W. O., Co., Inc., 1297 Terminal Ave., Detroit 14, Mich.
Barth Mfg. Co., The, Milldale, Conn.
Bartlett Mfg. Co., 3003 E. Grand Blvd., Detroit 2, Mich.
H. R. Basford Co., 235 Fifteenth St., San Francisco 3, Calif.
Bastian-Blessing Co., 4201 W. Peterson Ave., Chicago 46, Ill.
Bateman Foundry & Machine Co., 7th St. & First Ave., Mineral Wells, Texas
Bates Products, Inc., 1129 E. 74th St., Chicago 19, Ill.
Bausch & Lomb Optical Co., 895 St. Paul St., Rochester 2, N. Y.
Bay State Abrasive Products Co., 12 Union St., Westboro, Mass.
Bay State Tap & Die Co., 75 Chauncey St., Mansfield, Mass.
Bearium Metals Corp., 258 State St., Rochester 4, N. Y.
Beaver Pipe Tools, Inc., 310 Dana Ave., Warren, Ohio.
Beaverdell Co., 2947 N. 8th Ave., Phoenix, Arizona.
Becker Bros. Carbon Co., 3450 S. Laramie Ave., Cicero 50, Ill.
Be-Co Engineering Co., 9628 E. Valley Rd., Rosemead, Calif.
Behr-Manning Corp., 3358 Howe St., Troy, N. Y.
Belden Mfg. Co., 415 S. Kilpatrick Ave., Chicago 44, Ill.
Bellevue Industrial Furnace Co., Detroit, Mich.
Bellows Co., The, 230 W. Market St., Akron 3, Ohio.
Belmont Abrasives, 285 Newbury St., Boston 15, Mass.
Belmont Smelting & Refining Wks. Inc., 330 Belmont Ave., Brooklyn 7, N. Y.
Bemis Bros. Bag Co., 408 Pine St., Box 132, St. Louis 2, Mo.
Bemis Bros. Corp., 325 27th Ave., N.E., Minneapolis, Minn.
Ben-Nek Holder, Inc., 41 W. Main St., Branford, Conn.
Benjamin Elec. Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill.
Chas. A. Bennett Co., Inc., 237 N. Monroe St., Peoria 3, Ill.
Bentley Weldery Inc., 410 Teall Ave. & Riegel St., P. O. Box 1038, Syracuse 1, N. Y.
Bergen Pipesupport Corp., 50 Church St., New York 7, N. Y.
Berger Mfg. Div. Republic Steel Corp., 1038 Belden Ave. N. E., Canton 5, Ohio.
Bernard Welding Equip. Co., 10232 South Avenue N, Chicago 17, Ill.
Bernz, Otto, Co., Inc., 280 Lyell Ave., Rochester 6, N. Y.
Beryllium Corp., The, P. O. Box 1462, Reading Pa.
Besly-Welles Corp., Beloit, Wis.
Bethlehem Steel Co., 701 E. 3rd St., Bethlehem, Pa.
Bierman-Everett Foundry Co., 133 S. 20th St., Irvington 11, N. J.
Big Three Welding Equip. Co., 3602 W. 11th St., P. O. Box 3047, Houston 1, Texas.
Billings & Spencer Co., The, 1 Laurel St., Hartford 1, Conn.
Bingrod Co., 633 Jackson St., Kalamazoo 7, Mich.
Binks Mfg. Co., 3114 W. Carroll Ave., Chicago 12, Ill.
Bird Gas Corporation, 12820 Evergreen Rd., Detroit 23, Mich.
Birdsell Mfg. Co., Inc., 750 San Antonio Rd., Palo Alto, Calif.
Birtcher Corp., 4371 Valley Blvd., Los Angeles 32, Calif.
Bissett Steel Co., 945 E. 67th St., Cleveland 3, Ohio.
Black & Decker Mfg. Co., The, 600 E. Pennsylvania Ave., Towson 4, Md.
Black Bros. Co., Inc., The, 501 Ninth Ave., Mendota, Ill.
Blackford Mfg. Co., Inc., 223 S. High St., Hartford City 1, Ind.
Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 1, Wisc.
Bogue Electric Mfg. Co., 54 Iowa Ave., Paterson 3, N. J.
Bond, Charles, Co., 617-623 Arch St., Philadelphia 6, Pa.
Bonney Forge & Tool Works, Meadow & Cedar Sts., Allentown, Pa.
Borg-Warner Corp., Ingersoll Steel Div., 310 S. Michigan Ave., Chicago 4, Ill.
Borm Mfg. Co., 23 N. Union St., Elgin, Ill.
Boss Mfg. Co., The, 221 W. First St., Kewanee, Ill.
Boston Athletic Shoe Co., 25 Thorndike St., Cambridge 41, Mass.
Botfield Refractories Co., Swanson & Clymer Sts., Philadelphia 47, Pa.
Bouton Co., H. L., P.O. Box 208, Buzzards Bay, Mass.
Bowser, Inc., 1302 E. Creighton Ave., Ft. Wayne, Ind.
Boyer-Campbell Co., 6540 St. Antoine St., Detroit 2, Mich.
Brandt Cabinet Works, Inc., Hagerstown, Md.
Branson Instruments, Inc., 430 Fairfield Ave., Stamford, Conn.
Braun, J. G., Co., 7540 McCormick Blvd., Skokie, Ill.
Brennen, Bucci & Weber, Inc., 262 Mott St., New York 12, N. Y.
Bridgeport Brass Co., 30 Grand St., Bridgeport 2, Conn.
Bridgeport Chain & Mfg. Co., The, 962 Crescent Ave., Bridgeport 1, Conn.
Briggs Mfg. Co., Detroit 14, Mich.
Bristol Co., The, Waterbury 20, Conn.
Broderick & Bascom Rope Co., 4203 N. Union Blvd., St. Louis 15, Mo.
Brown & Sharpe Mfg. Co., 235 Promenade St., Providence 1, R. I.
Brown, W. R., Corp., 5720 W. Armitage Ave., Chicago 39, Ill.
Bruner Ivory Handle Co., Hope, Ark.
Brunner Mfg. Co., Inc., 1821 Broad St., Utica 1, N. Y.
Brush Development Co., 3405 Perkins Ave., Cleveland 14, Ohio.
Buck Mfg. Co., 1355 N. Tenth St., P.O. Box 692, San Jose 12, Calif.
Buckeye Oxygen Co., 801 First Natl. Bldg., Canton 2, Ohio.
Buckeye Tools Corp., P. O. Box 966, Dayton 1, Ohio.
Buda Co., 154th & Commercial Ave., Harvey, Ill.
Budd Co., Philadelphia 32, Pa.
Buffalo Bolt Co., 101 East Ave., No. Tonawanda, N. Y.
Buffalo Fire Appliance Corp., 221 Crane St., Dayton 1, Ohio
Buffalo Forge Co., 490 Broadway, Buffalo 5, N. Y.
Bullard, E. D., Co., 2680 Bridgeway, Sausalito, Calif.
Bullock, L. H., Co., Inc., 22 8th St., Richmond, Calif.
Bundy Tubing Co., 8109 E. Jefferson Ave., Detroit 14, Mich.
Bunell Machine & Tool Co., 1601 E. 23rd St., Cleveland 14, Ohio
Bunting Brass & Bronze Co., The, 715 Spencer St., Toledo 9, Ohio
Burdett Oxygen Co., 3360 Lakeside Ave., Cleveland 14, Ohio.
Burdett Oxygen Co. of Calif., 2014 Belgrave Ave., Huntington Park, Calif.
Burgess Parr Co., Freeport, Ill.
Burklyn Co., The, 3429 Glendale Blvd., Los Angeles, Calif.
Burndy Engrg. Co., Inc., Boston Post Road and Richards Ave., Norwalk, Conn.
Butterfield Div., Union Twist Drill Co., Derby Line, Vt.

C

C. B. Tool Co., Box 94, Lancaster, Pa.
C B C Welding Corp., 422 E. 102nd St., New York 29, N. Y.
C-O Two Fire Equip. Co., P. O. Box 390, U. S. Highway 1, Newark 1, N. J.
Cabot, Samuel, Inc., 151 Milk St., Boston 9, Mass.
Caddy Arc Welding Accessory Div., Erico Products, Inc., 2070 E. 61st Place, Cleveland 3, Ohio
Calder Mfg. Co., 630 N. Prince St., Lancaster, Pa.
Calf-Terio Sales Inc., 1125 Polk St., Ft. Wayne 7, Ind.
California Welding Supply, 405 N. Lincoln, Stockton, Calif.
Cambridge Co., Div. of Carrier Corp., 2 Industrial Park, Lowell, Mass.
Cam-Lok Div., Empire Prod. Inc., 9201 Blue Ash Rd., Cincinnati 36, Ohio
Cambell Machine Div. of American Chain & Cable Co., Inc., 929 Connecticut Ave., Bridgeport 2, Conn.
Campbell, J. A., Co., 645 E. Wardlow Rd., Long Beach 7, Calif.
Canadian Liquid Air Co., Ltd., 1111 Beaver Hill, Montreal, Canada
Canadian Radium & Uranium Corp., 630 5th Ave., New York 20, N. Y.
Canton Alloys, Inc., 2154 Bolivar Road, S.W., Canton 6, Ohio
Capewell Mfg. Co., 60 Governor St., Hartford 2, Conn.
Carbide & Carbon Chemicals Div., 30 E. 42nd St., N. Y. 17, N. Y.
Carborundum Co., The, Buffalo Ave., Niagara Falls, N. Y.
Card, S. W., Mfg. Co., Div. of Union Twist Drill Co., Rumford Ave., Mansfield, Mass.
Cardinal Machine Co., 109 S. Jackson St., Glendale 5, Calif.
Cardox Div., Chemetron Corp., 840 N. Michigan Ave., Chicago 11, Ill.
Carey, Philip, Mfg. Co., Lockland, Cincinnati 15, Ohio
Carhoff Co., 11706 Kinsman Rd., Cleveland 20, Ohio
Carlson Mfg. Co., 195 W. Carson St., Pittsburgh 19, Pa.
Carlson Rules & Measures, Henry Disston Div., 1617 S. California Ave., Monrovia, Calif.
Carnegie-Illinois Steel Corp., 434 Fifth Ave., Carnegie Bldg., Pittsburgh 30, Pa.
Carol Cable Co., 20 Central Ave., Pawtucket, R. I.
Carpenter Products, Inc., 85 Washburn St., Bridgeport, Conn.
Carpenter Steel Co., The, Front & Bern Sts., Reading, Pa.
Carson-Newton Co., 61-71 Mill St., Belleville 9, N. J.
Cash, A. W., Valve Mfg. Corp., Wabash & Morgan Sts., Decatur, Ill.
Castle, A. M. & Co., 1132 W. Blackhawk St., Chicago 22, Ill.
Caterpillar Tractor Co., Peoria, Ill.
Cayuga Machine & Fabricating Co., Depew-Buffalo, N. Y.
Central Sales Corp., 20 North Wacker Dr., Chicago 6, Ill.
Central Steel & Wire Co., 3000 W. 51st St., Chicago 32, Ill.

Century Engrg. Co., 4 Orono St., Clifton, N. J.
Ceramic Cups Inc., 305 E. 45th St., New York 17, N. Y.
Chain Belt Co., 1600 W. Bruce St., Milwaukee 4, Wis.
Challenge Machinery Co., The, First St., Grand Haven, Mich.
Champion Blower & Forge Co., Harrisburg Ave. & Charlotte St., Lancaster, Pa.
Champion DeArment Tool Co., S. Main St., Meadville, Pa.
Champion Lamp Works, 600 Broad St., Lynn, Mass.
Champion Rivet Co., The, Harvard & E. 108th St., Cleveland 5, Ohio
Chappel, L. H. & Co. 1137 Post Rd., Fairfield, Conn.
Chase Brass & Copper Co., 236 Grand St., Waterbury 20, Conn.
Chatham Electronics, Div. of Gera Corp., Livingston, N. J.
Chek-Shock Mfg. Co., P. O. Box 488, Fowler, Calif.
Chelsea Fan & Blower Co., Inc., 639 South Ave., Plainfield, N. J.
Chemetron Corp., National Cylinder Gas Div., 840 N. Michigan Ave., Chicago 11, Ill.
Chemical Corp., The, Springfield 9, Mass.
Chemical Research Associates, 333 N. Michigan Ave., Chicago, Ill.
Chemalloy Electronics Corp., Gillespie Airport, Santee, Calif.
Chemclean Products, 610 Warren St., Brooklyn, N. Y.
Chester Hoist Div., The National Screw & Mfg. Co., P. O. Box 376, Lisbon, Ohio
Chicago Blower Corp., 9867 Pacific Ave., Franklin Park, Ill.
Chicago Boiler Co., 1965 Clybourn Ave., Chicago 14, Ill.
Chicago Bridge & Iron Co. 332 S. Michigan Ave., Chicago, Ill.
Chicago Eye Shield Co., 2727 W. Roscoe St., Chicago 18, Ill.
Chicago Hardware Foundry Co., 2500 Commonwealth Ave., N. Chicago, Ill.
Chicago Latrobe Twist Drill Works, 411 W. Ontario St., Chicago 10, Ill.
Chicago Mfg. & Dist. Co., 1928 W. 46th St., Chicago 9, Ill.
Chicago Pneumatic Tool Co., 6 E. 44th St. New York 17, N. Y.
Chicago Rawhide Mfg. Co., 1286 Elston Ave. Chicago 22, Ill.
Chicago Steel & Wire Co., 10257 S. Torrence Ave., Chicago 17, Ill.
Chicago Tool and Engrg. Co., 8383 S. Chicago Ave., Chicago 17, Ill.
Chicago Wheel & Mfg. Co., 1101 W. Monroe St., Chicago 7, Ill.
Chisholm-Moore Hoist Corp., Fremont Ave., Tonawanda, N. Y.
Chrysler Corp., Third Natl. Bank Bldg., Dayton 2, Ohio
Cia. Productora De Oxigeno, S. A., Apartado 318, 5 De Mayo 1175 Pte. Monterrey, N. L., Mexico
Cincinnati Elec. Tool Co., Madison & Edwards Rd., Cincinnati 8, Ohio
Cincinnati Tool Co., 1944 Waverly Ave., Cincinnati 12, Ohio
Cincinnati Milling Machine Co., The Cincinnati Grinders Inc., 4701 Marburg Ave., Cincinnati 9, Ohio
City Tank Corp. 53-09 97th Pl., Corona, L. I., N. Y.
Clarage Fan Co., N. & Porter Sts., Kalamazoo 16, Mich.
Clare, C. P. & Co., 4719 W. Sunnyside Ave., Chicago 30, Ill.
Clark, Robert H. Co., 9330 Santa Monica Blvd., Beverly Hills, Calif.
Clark Controller Co., The, 1146 E. 152nd St., Cleveland 10, Ohio
Clark, James, Jr., Electric Co., 645 Bergman St. Louisville 3, Ky.
Clarkson Laboratories, Inc., 930 N. Darien St., Philadelphia, Pa.
Clayton & Lambert Mfg. Co., 1701-1715 Dixie Highway, Louisville 10, Ky.
Clayton-Sherman Abrasives Co., 3896 Lonyo Rd., Detroit 10, Mich.
Cleco Div., Reed Roller Bit Co., 5125 Clinton Drive, P. O. Box 2119, Houston 20, Texas.
Clementina Ltd., 2277 Jerrold Ave., San Francisco 24, Calif.
Clements Mfg. Co., 6645 S. Narragansett Ave., Chicago 38, Ill.
Clemson Bros., Inc., 22 Cottage St., Middletown, N. Y.
Cleveland Chain & Mfg. Co., Broadway & Henry Sts., Cleveland 5, Ohio
Cleveland Crane & Engrg. Co., Wickliffe, Ohio
Cleveland Electric Motor Co. 5213 Chester Ave., Cleveland 3, Ohio
Cleveland Tungsten, Inc., 10200 Meech Ave., Cleveland 5, Ohio
Cleveland Twist Drill Co., The, 1242 E. 49th St., Cleveland 14, Ohio
Climax Corp., 2446 University Ave., St. Paul 14, Minn.
Climax Molybdenum Co., 500 Fifth Ave., New York 36, N. Y.
Clinton Prod. Co., 701 Tecumseh Rd., Clinton, Mich.
Clover Mfg. Co., 327 Main St., Norwalk, Conn.
Coast Metals Inc., 201 Redneck Ave., Little Ferry, N. J.
Cobb, R. L., 56 Euclid Ave., Willoughby, Ohio
Coffing Hoist Co., 800 Walters St., Danville, Ill.
Cogmatic Co., 1330 N. Franklin Pl., Milwaukee Wis.
Cogsdill Twist Drill Co., 12950 W. Eight Mile Road, Box 97, College Park Sta., Detroit 21, Mich.
Collins-Edmonds Inc., 4041 Ridge Ave., Bldg. #25, Philadelphia 29, Pa.
Collyer Insulated Wire Co., Inc., 249 Roosevelt Ave., Pawtucket 1, R. I.
Colonial Abrasive Products Co., 6th & Harry Sts., Conshohocken, Pa.
Colonial Alloys Co., Ridge Ave. & Crawford Sts., Philadelphia 29, Pa.
Colonial Leather Co., 622 W. Oregon St., Milwaukee 4, Wisc.
Colorado Fuel & Iron Corp. Continental Oil Building, 1755 Glenarm Place, Denver 1, Colo.
Columbia Chemical Products Co., 553 Beaufait, Detroit 7, Mich.
Columbia Electric Mfg. Co., 4519 Hamilton Ave. N.E., Cleveland 14, Ohio
Columbia Machinery & Engineering Corp., Hamilton, Ohio
Columbia Steel Co., Subsidiary, U. S. Steel Corp., Russ Bldg., 235 Montgomery St., San Francisco 6, Calif.
Columbian Vise & Mfg. Co. 9021 Bessemer Ave., Cleveland 4, Ohio
Columbus Anvil & Forging Co., 117 W. Frankfort St., Columbus 16, Ohio
Columbus McKinnon Chain Corp., 120 Freemont St., Tonawanda, N. Y.
Combined Welder & Mach. Corp., 73-40 Grand Ave., Maspeth, L. I., N. Y.
Combustion Control Corp., 77 Broadway, Cambridge 42, Mass.
Commercial Gas Corp., P. O. Box 348, 111 Scott St., Wilkes-Barre, Pa.
Commercial Shearing & Stamping Co., The, Youngstown, Ohio
Commonwealth Prods. Co. de Mexico, S. A., Ave. Morelos No. 67, Mexico, D. G.
Compania Mexicana AGA, SA., Claviiero 40, Apartado Postal No. 1474, Mexico 1, D. F.
Compania Mexicana De Soldaduro Autogena, S. A., Ave. Morelos No. 76-A, Apartado Postal 7295, Mexico, D. F.
Compressed Gas Assn., Inc., 11 W. 42nd St., New York 36, N. Y.
Compressed Gas Cylinders, Inc. 2909 E. 54th St., Vernon, Calif.
Conco Engrg. Works, 50 West St., Mendota, Ill.
Connor Steel Products, 24690 Telegraph Rd., Detroit 19, Mich.
Continental Gin Co., Industrial Div., Birmingham, Ala.
Continental Industrial Engineers' Co., Inc., 176 W. Adams St., Chicago 3 Ill.
Contour Marker Corp., 1843 E. Compton Blvd., Compton, Calif.
Cook's Adam, Sons, Inc., 5 Stiles St., Linden, N. J.
Cooley Electric Mfg. Corp., 38 S. Shelby St., Indianapolis 7, Ind.
Cooper Alloy Corp., Hillside 5, N. J.
Cooper Welders, Inc., 5826 Dempster St., Morton Grove, Ill.
Copco Eastern, P. O. Box 2568, Paterson, N. J.
Copperloy Corp., 4103 Brookpark Rd., Cleveland 29, Ohio
Coppus Engineering Corp., 344 Park Ave., Worcester 10, Mass.
Cornell-DuBilier Electric Corp., Hamilton Blvd., South Plainfield, N. J.
Cornell Maritime Press, Cambridge, Md.
Corning Glass Works, Corning, N. Y.
Corpus Christi Oxygen Co., 2827 Agnes St. Corpus Christi, Texas.
Cortland Grinding Wheels Corp., 1 Huntington St., Chester, Mass.
Cortland Sales & Products, Inc., Pearl St., Cortland, Ohio.
Couse Manufacturing, Inc., 300 Passaic St., Newark 4, N. J.
Coyne Chemical Co., 155 W. Bodley Ave., Memphis, Tenn.
Coyne Cylinder Co., 224 Ryan Way, So. San Francisco, Calif.
Craftsweld Equip. Corp., 26—26 Jackson Ave., Long Island City 1, N. Y.
Craig Welding Supply Co., 5670 Santa Fe Ave., Los Angeles 58, Calif.
Cramer, R. W., Co., Inc., 1941 Plant St., Centerbrook, Conn.
Crane Co., 836 S. Michigan Ave., Chicago 5, Ill.
Crescent Co., Inc., The, Carol Cable Div., Pawtucket, R. I.
Crescent Insulated Wire & Cable Co., Trenton, N. J.
Crescent Tool Co., 200 Harrison St., Jamestown 4, N. Y.
Crobalt, Inc., 2800 S. State St., Ann Arbor 1, Mich.
M. J. Crose Mfg. Co., 2765 Dawson Rd., Box 3368, Tulsa, Okla.
Crouse Hinds Co., Wolf & 7th N. St., Syracuse, N. Y.
Crucible Steel Co. of America, Henry W. Oliver Bldg., Mellon Sq., Pittsburgh, Pa. & Box 28, Harrison, N. J.; Vacuum Metals Div., Box 977, Syracuse 1, N. Y.
Cullen-Friestedt Co., 1300 S. Kilbourn Ave., Chicago 23, Ill.
Culver Glass Specialties, Inc., 28 St. Marks Place, New York 3, N. Y.
Cumming Tools, Inc., 501-03 E. 18th St., Kansas City 8, Mo.
Cummins-Chicago Corp., 4740 Ravenswood, Chicago 40, Ill.
Curtis Machine Co., 1300 E. 2nd St., Jamestown, N. Y.
Curtis Pneumatic Machinery Div. of Curtis Mfg. Co., 1905 Kienlen Ave., St. Louis 20, Mo.
Curtiss-Wright Corp., Princeton Div., Princeton, N. J.
Custanite Corp., 1228 Utica Ave., Brooklyn 3, N. Y.
Cut-O-Guide Sales Co., 1900 Euclid Ave., Cleveland 15, Ohio.
Cutler-Hammer, Inc., 315 N. 12th St., Milwaukee 1, Wisc.
Cutter Machine Co. 3723 Commonwealth Ave., St. Louis 17, Mo.

D

D-V Welding Controls, P.O. Box 357, Hayward, Calif.
Dalweld Co., 11 Bertel Ave., Mount Vernon, N. Y.
Damascus Steel Prods. Corp., 2215 Kiswaukee St., Rockford, Ill.
Daniels, C. R., Inc., 75 West St., New York N. Y.
Danly Machine Spec., Inc., 2100 S. Laramie, Chicago 50, Ill.
Darling Valve & Mfg. Co., Ft. of Walnut St., Williamsport, Pa.
Davies & Son, Inc., 1416 Westwood Blvd. Los Angeles 24, Calif.
Davis Emergency Equip. Co., Inc., 47 Halleck St., Newark, N. J.
Davis Regulator Co., 2544 S. Washtenaw Ave., Chicago 8, Ill.
Dayton Chemical Products Laboratories, Inc., West Alexandria, Ohio
Dayton Grinding Wheel Co., 1101 Negley Pl., Dayton, Ohio.
Dayton Rogers Mfg. Co., Minneapolis 7 Minn.
DeBothezat Fans Div., Amer. Machine & Metals, Inc., E. Moline, Ill.
Delaware Tool Steel Corp., Wilmington 99, Del.
Delta File Works, Inc., 4837 James St., Philadelphia 37, Pa.
Delta Oxygen Co., 611 Court Ave., Memphis 5, Tenn.
Delta Welder Corp. 8525 Livernois, Detroit 4 Mich.
Dennis Chemical Co., 2701 Papin St., St. Louis 3, Mo.
Denver Oxygen Co., Inc., 1160 10th St., Denver 1, Colo.
DeSanno, A. P. & Son, Inc., Wheatland St., Phoenixville, Pa.
Desmond Stephan Mfg. Co., 317 S. Walnut St. Urbana, Ohio.
Despatch Oven Co., 619 Eight St., S. E. Minneapolis 14, Minn.
Detroit Electrode Holders Mfg. Co., 3437 Book Bldg., Detroit, Mich.
Detroit First Aid Co., 6335 Grand River Ave., Detroit 8, Mich.
Detroit Hoist & Machine Co., 8300 Morrow St. Detroit 11, Mich.
Detroit Stamping Co., 372 Midland Ave. Detroit 3, Mich.
Detroit Surfacing Machine Co., 1333 East Eight Mile Road, Detroit 20, Mich.
Detroit Testing Machine Co., 9390 Grinnell Ave., Detroit 13, Mich.
Deutschman Corp., Canton, Mass.
Devco Engrg. Inc., P. O. Box 387, Caldwell, N. J.
Devcon Corp., Danvers, Mass.
DeVilbiss Co., 300 Phillips Ave., Toledo 1, Ohio.
DeWalt, Inc., Fountain Ave., Lancaster, Pa.
Diamalloy Co., The P.O. Box 190, Gowanda, N. Y.
Diamond Alkali Co., Oliver Bldg., Pittsburgh 22, Pa.
Diamond Mechanical Goods, Div. of The B. F. Goodrich Co., 444 S. Main St., Akron, Ohio.
Diamonite Products Div., The United States Ceramic Tile Co., Shreve, Ohio
Dice, J. W., Co., 16 Highwood Ave., Englewood, N. J.
Dico Corp., 200 Southwest 16th St., Des Moines 5, Ill.
Diener, Geo. W., Mfg. Co., 400 Monticello Ave., Chicago 24, Ill.
Die Typing Corp., 419 Book Bldg., Detroit 26, Mich.
Diesel Power Inc., P.O. Box 72, Greenville, Pa.
Dill Mfg. Co., 700 E. 82nd St., Cleveland 3, Ohio.
Dillon W. C. & Co., Inc., 14620 Keswick, Van Nuys, Calif.
Dings Magnetic Separator Co., 4740 W. Electric Ave., Milwaukee 14, Wis.
Disston Division, H. K. Porter Company, Inc., Unruh & Milnor Sts., Philadelphia 35, Pa.
Diversey Corp., The Metal Industries Dept., 1820 W. Roscoe St., Chicago 13, Ill.
Divine Bros. Co., 200 Seward Ave., Utica 1, N. Y.
Division Lead Co., 7742 West 61st Place, Summit, Ill.
Dixon, Joseph Crucible Co., 167 Wayne St., Jersey City 2, N. J.
Dixon Valve & Coupling Co., Hancock St. & Columbia Ave., Philadelphia 22, Pa.
DoAll Co., 254 N. Laurel Ave., DesPlaines, Ill.
Dockson Corp. 3839 Wabash Ave., Detroit 8, Mich.
Dodge Mfg. Corp., 500 S. Union St., Mishawaka, Ind.
Dollinger Corp., 11 Centre Park, Rochester 3, N. Y.
Dominion Bridge Co., Ltd., P. O. Box 280, Montreal, Quebec, Canada.
Douglas Pipe Machine Co., 412 South California St., Monrovia Calif.
Dow Chemical Co., 1014 Jefferson Ave., Midland, Mich.
Downs Crane & Hoist Co., The, 540 W. Vernon Ave., Los Angeles 37, Calif.
Drake, Frederick J., & Co., 117 Green Bay, Wilmette, Ill.
Drawalloy Corp., Lincoln Hway West at Alloy St., York, Pa.

Dremel Mfg. Co., 2420 18th St., Racine, Wis.
Drennan, Lee J., Inc., 430 W. Main St., Arcade, N. Y.
Dresser Mfg. Div., 51 Fisher Ave., Bradford, Pa.
Driver-Harris Co., Harrison, N. J.
Duff Norton Mfg. Co., The, 2709 Preble Ave., Pittsburgh 30, Pa.
Dumore Co., 1300 Seventeenth St., Racine Wis.
du Mont Corp., The, Greenfield, Mass.
Dunn Products, 1216 W. Madison St., Chicago, Ill.
du Pont de Nemours, E. I. & Co., Inc., Wilmington 98, Del.
Duquesne Electric & Mfg. Co., Pittsburgh 6, Pa.
Dur-a-Bilt Products, Inc., Box 1, Sussex, Wis.
Duracote Corp., Ravenna, Ohio
Duralloy Co., Scottdale, Pa.
Duramic Prod., Inc., 262—72 Mott St., New York, N. Y.
Durbin Durco, 6611 Oliver St. Rd., St. Louis 5, Mo.
Duro Engineering Co., 51 Oregon Ave., Hamden 17, Conn.
Duro-Dyne Corp., 800 3rd Ave., New Hyde Park, N. Y.
Duro Metal Products Co., 2649 N. Kildare Ave., Chicago 39, Ill.
Dustender Co., Div. Hard and Co., Inc., Pontiac Rd., Ann Arbor, Mich.
Dye Oxygen Co., Inc., 3332 West McDowell Rd., Phoenix, Ariz.

E

Eagle Mfg. Co., 24th & Charles St., Wellsburg, W. Va.
Eagle Picher Co., The, American Bldg., Cincinnati 1, Ohio
Eagle Welding Equipment Co., 5085 Broadway, Chicago 40, Ill.
Earlbeck & Landrum, Inc., 8041 Pulaski Hwy., Baltimore County, Md.
Eastern Equipment Co., Inc., 44 Terwood Road, P. O. Box 897, Willow Grove, Pa.
Eastern Stainless Steel Corp., Box 1975, Baltimore 3, Md.
Eastern Tool & Mfg. Co., 1 Montgomery St., Belleville 9, N. J.
Eastman Kodak Co., 343 State St., Rochester 4, N. Y.
Eaton Mfg. Co., Wilcox Rich Div., Detroit, Mich.
Ebert Electronics Corp., 212-26 Jamaica Ave., Queens Village 28, N. Y.
ECCO High Frequency Corp., 7020 Hudson Blvd., North Bergen, N. J.
Eclipse Fuel Engineering Co., 711 S. Main St., Rockford, Ill.
Edin Div., Epsco, Inc., 588 Commonwealth Ave. Boston 15, Mass.
Edward Valves, Inc., 1200 W. 145th St., East Chicago, Ind.
Eisler Engrg. Co., Inc., 749 South 13th St., Newark 3, N. J.
Eitel-McCullough, Inc., 1570 San Mateo Ave., San Bruno, Calif.
Ekstrom Electric, 18633 Weaver Ave., Detroit 28, Mich.
Elastic Stop Nut Corp. of Amer., Union, N. J.
Electric Arc, Inc., 152 Jelliff Ave., Newark 8, N. J.
Electric Auto-Lite Co., Champlain-Mulberry Sts., Toledo 1, Ohio
Electric Blower Co., 352 Atlantic Ave., Boston 10, Mass.
Electric Controller & Mfg. Co., 2700 E. 79th St., Cleveland 4, Ohio
Electric Hose & Rubber Co., 12th & Dure Sts. Wilmington 99, Del.
Electric Machinery Mfg. Co., 1331 Tyler St., N. E., Minneapolis 13, Minn.
Electric Soldering Iron Co., Inc., W. Elm St., Deep River, Conn.
Electric Storage Battery Co., The, Exide Industrial Division, 42 S. 15th St., Philadelphia 2, Pa.
Electrical Industries, Div. Amperex Electronic Corp., 230 Duffy Ave., Hicksville, L. I., N. Y.
Electro Cover Glass Co., Inc., 110 18th St., Sharpsburg Br., Pittsburgh 15, Pa.
Electro Refractories & Abrasives Co., 344 Delaware Ave., Buffalo 2, N. Y.
Electrocircuits, Inc. 401 E. Green St., Pasadena 1, Calif.
Electroloy Co., Inc., The, 1600 Seaview Ave., Bridgeport 8, Conn.
Electron-Arc, Inc., 244 Broad St., Lynn, Mass.
Electrons, Inc., 127 Sussex Ave., Newark 3, N. J.
Electronics Corp. of America, Photoswitch Div., 77 Broadway, Cambridge 42, Mass.
Elematic Equip. Corp., 6731-A S. Chicago Ave., Chicago 37, Ill.
Elliott Glove Co., Inc., 127 Huron Ave., Oconto, Wis.
Elliott Mfg. Co., 222 Prospect Ave., Binghamton, N. Y.
Ellison Mfg., Box 131, Mediapolis, Ia.
Ellwood Products Corp., Ellwood City, Pa.
Emco Pneumatic Corp., 1317-19 Locust St., Des Moines, Ia.
Emerson Elec. Mfg. Co., 8100 Florissant Ave., St. Louis 21, Mo.
Engwald Corp., 125 Sheridan Blvd., Inwood, L. I., N. Y.
Equipto, Aurora, Ill.
Ergolyte Mfg. Co., 3626 N. Lawrence St., Philadelphia 40, Pa.
Erico Products, Inc., 2070 E. 61st Place Cleveland 3, Ohio.
Essex Brass Corp., 2000 Franklin St., Detroit 7, Mich.
Eutectic Welding Alloys Corp., 40—40 172nd St., Flushing 58, N. Y.
Evans Rule Co., 412 Trumbull, Elizabeth, N. J.
Ever-Tite Alloy Corp., 1-3 Bleeker St., New York, N. Y.
Expert Welding Machine Co., Div. Expert Die and Tool Co., Inc., 17144 Mt. Elliott St., Detroit 12, Mich.

F

Fairmont Tool & Forging Co., 10611 Quincy Ave., Cleveland, Ohio.
Falcon Equipment Co., 13th St., New Brighton, Pa.
Famco Machine Co. 1336 18th St., Racine, Wis.
Fansteel Metallurgical Corp., 2200 Sheridan Rd., North Chicago, Ill.
Far-Ex Corp., 75 West St., New York, N. Y.
Farrelloy Co., 1243-45 N. 26th St., Phila. 21, Pa.
Farris Engineering Co., 400 Commercial Ave., Palisades Park, N. J.
Faulk, F. R., Equipment Sales, 13 Wabash Ave., Pittsburgh 20, Pa.
Fauver J. N., Co., Inc., 49 W. Hancock Ave., Detroit 1, Mich.
Federal Electric Prods. Co., 50 Paris St., Newark 5, N. J.
Federal Machine & Welder Co., The, Overland Ave., Warren, Ohio
Federal Telephone & Radio Corp., 100 Kingsland Road, Clifton, N. J.
Federal Tool Engineering Co., 1384 Pompton Ave., Cedar Grove, N. J.
Fenway Machine Co., 3107 North Broad St., Philadelphia 32, Pa.
Ferguson Machine & Tool Co., Roller Gear Div., P. O. Box 191, St. Louis 21, Mo.
Ferrara, Inc., 8106 W. Nine Mile Rd., Oak Park 37, Mich.
Ferro Corp., 4150 E. 56th St., Cleveland 5, Ohio.
Ferro Machine & Tool Corp., 5514 W. Washington St., Indianapolis, Ind.
Fibre Abrasive Corp., 1129 E. 74th St., Chicago 19, Ill.
Fibre-Metal Prod. Co., The, 5th & Tilghman Sts. Chester, Pa.
Fire Gun Sales Corp., 2500 W. 7th Ave., Denver 4, Colo.
Fisher & Norris (Eagle Anvil Wks), 37-45 Bloomsbury St., Trenton 1 N. J.
Flexaust Co., 100 Park Ave., New York 17, N. Y.
Flexo Products, Inc., 24864 Detroit Rd., Westlake, Ohio
Flexonics Corp., 1315 S. Third Ave., Maywood, Ill.
Flexweld Mfg. Co., Depot St., Buckland, Conn.
Flint Products Co., 2714 Gerritsen Ave., Brooklyn 29, N. Y.
Flood Safety Prod. Co., 3035-37 W. Lake St., Chicago 12, Ill.
Frank Niemi Metal Products, Inc., Box 242, Woodlawn Ave., Gurnee, Ill.
Foley Mfg. Co., 3300 Fifth St., N. E., Minneapolis 18, Minn.
Foote Mineral Co., 18 W. Chelten Ave., Philadelphia 44, Pa.
Ford, J. B., Wyandotte, Mich.
Ford, M. A., Mfg. Co., Inc., 864 W. River St. Davenport, Ia.
Ford Chain Block Div. of American Chain & Cable Co., Inc., 1100 E. Princess St., York, Pa.
Ford Steel Co., 5051 Pattison Ave., St. Louis 10, Mo.
Foredom Electric Co., 27 Park Place, New York 7, N. Y.
Forney Mfg. Co., 1800 La Porte Ave., Fort Collins, Colorado.
Foster Alum. Alloy Prod. Corp., 45 Pearl St., Forestville 13 N. Y.
Foster Transformer Co., 3820 Colerain Ave., Cincinnati 23, Ohio.
Foster Wheeler Corp., 165 Broadway, New York 6, N. Y.
Fox Grinders, Inc., Oliver Bldg., Pittsburgh, Pa.
Franklin Transformer Mfg. Co., 65 22nd Ave., N.E., Minneapolis 18, Minn.
Frasse, Peter A., & Co., Inc. 17 Grand St., New York 17, N. Y.
Frederick Gumm Chemical Co., Inc. 538 Forest St., Kearney, N. J.
Friez Instrument Div. of Bendix Aviation Corp. Taylor Ave. & Lock Haven Blvd., Baltimore 4, Md.
Frommelt Industries, 290 Main St., Dubuque, Iowa
Frostrode Div. of Viking Products, 3066 E. Outer Drive, Detroit 34, Mich.
Fuller, G. C., Mfg. Co., 1621 Central Ave., Cincinnati 14, Ohio.
Furane Plastics, Inc., 4516 Brazil St., Los Angeles, Calif.
Fusion Engineering, 17921 Roseland Ave., Cleveland 12, Ohio.

G

Galland-Henning Mfg. Co., 2753 S. 31st St., Milwaukee 46, Wis.
Galv-Weld Products 324 East Second St., Dayton, Ohio.
Galvicon Corp., 40 W. 29th St., New York 1, N. Y.
Gamma Corp., The, Mansfield, Mass.
Gar-Bro. Mfg. Co., 2416 E. 16th St., Los Angeles 21, Calif.
Garden City Industries, Inc., 900 W. Jackson Blvd., Chicago, Ill.
Gardner Denver Co., Front St., Quincy, Ill.
Garrett, George K., Co., Inc., Tioga & D Sts., Philadelphia 34, Pr.
Gas Appliance Service, Inc., 1940 Belmoral Ave., Chicago, Ill.
Gas Arc Supply, 223-25 N. 16th St., Philadelphia 2, Pa.
Gases Agamex, S.A., Clauijero No. 40, México 1, D.F.
Gases Industriales, S.A., Apartado Postal Numero 295, San Luis, Potosi, S.L.P., Mexico.
Gasflux Co., The, 145 N. Logan St., Elyria, Ohio.
Gaso Equipment Co., 3253 N. Kedzie Ave., Chicago 18, Ill.
Gaspro, Ltd., P. O. Box 2454, 500 Kuwili St., Honolulu 4, T. H.
Gasweld Equipt. Co., 3100 S. Kedzie, Chicago, Ill.
Gates Rubber Co., The, 999 S. Broadway, Denver 17, Colorado.
General Aniline & Film Co., Ansco Div., Binghamton, N. Y.
General Blower Co., 8635 Ferris Ave., Morton Grove, Ill.
General Cable Corp., 420 Lexington Ave., New York 17, N. Y.
General Carbon Co., Naperville, Ill.
General Ceramics Corp., Chemical Equipment Div., Keasbey, N. J.
General Detroit Corp., 2272 E. Jefferson Ave., Detroit 7, Mich.
General Electric Co., 1 River Rd., Schenectady 5, N. Y.
General Electric Co., Specialty Control Dept., Waynesboro, Va.
General Electric Co., X-Ray Dept., 4855 Electric Ave., Milwaukee, Wis.
General Pacific Corp., 1800 S. Hooper Ave., Los Angeles 21, Calif.
General Refractories Co., 1600 Real Estate Bldg., Philadelphia 7, Pa.
General Scientific Equip. Co., 7516 Limekiln Pike, Philadelphia 50, Pa.
General Welding & Equip. Co., 268 Northampton St., Boston 18, Mass.
General Welding Co., Schoenersville Rd., Bethlehem, Pa.
Generant Engineering Co. 260 S. 20th St., Newark 3, N. J.
Genter, C. D. & Co., 2109 Broad St., Chattanooga, Tenn.
Georator Corp., Manassas, Va.
Gevaert Co. of America, Inc., The, 321 W. 54th St., New York, N. Y.
Gibbs, Ltd., 3390 Washington St., Boston 30, Mass.
Glendale Optical Co., Inc., 600 W. Merrick Rd., Valley Stream, L. I., N. Y.
Goagle Parts Co., The, Flexo Products, Inc., 1467 W. 9th, Cleveland, Ohio.
Goldsmith Bros. Smelting & Refining Co., 1300 W. 59 St., Chicago 36, Ill.
Goodall Rubber Co., Whitehead Rd., Trenton 4, N. J.
Goodheart-Willcox Co., 1322 S. Michigan Ave., Chicago 5, Ill.
Goodrich, B. F., Co., 500 S. Main St., Akron 11, Ohio.
Goodrich Welding Equipment Corp., 237 Chicago Dr., P. O. Box 278, Hudsonville, Mich.
Goodyear Tire & Rubber Co., Inc., 1144 E. Market St., Akron 16, Ohio.
Gordon, Claud S., Co., 3000 S. Wallace St., Chicago 16, Ill.
Gorham Tool Co., 1440 Woodrow Wilson St., Detroit, Mich.
Goss Gas, Inc., Route No. 8, Glenshaw, Pa.
Graham Mfg. Corp., 2nd Ave., Needham Heights 94, Mass.
Graham Rotary File & Tool Corp., 4816 Tacony St., Philadelphia 37, Pa.
Grand Specialties Co., 3101 West Grand Ave., Chicago 22, Ill.
Granite City Steel Co., 20th and Madison Ave., Granite City, Ill.
Gray Co., Inc., 60 11th Ave., N. E., Minneapolis 13, Minn.
Gray Mills Corp., 2006 Ridge Ave., Evanston Ill.
Great Lakes Steel Corp., Tecumseh Rd., Ecorse, Detroit 18, Mich.
Greene Tweed & Co., 318 Elm Ave., North Wales, Pa.
Greenfield Tap & Die Corp., Sanderson St., Greenfield, Mass.
Greenlee Tool Co., Div. of Greenlee Bros. & Co., 2136 Twelfth St., Rockford, Ill.
Grieve-Hendry Co., Inc., 1401 W. Carroll, Chicago, Ill.
Griffin, G. W., Co., 93 Memorial St., Franklin, N. H.
Grinding Wheel Institute, 2130 Keith Bldg., Cleveland, Ohio
Grinnell Co., Inc., 260 W. Exchange St., Providence 1, R. I.
Griscom-Russell Co., 285 Madison Ave., New York, N. Y.
Guide-Weld Co., The, 835 P St., Fresno 21, Calif.
Gulf Oxygen Co., Inc., Welders Equipment Co., Inc., 312 N. Kirkman St., Lake Charles, La.
Gulf Steel & Wire Co., Grant Bldg., Pittsburgh, Pa.
Gulton Industries, 212 Durham Ave., Metuchen, N. J.
Gumm, Frederick, Chemical Co., Inc. 538 Forest St., Kearney, N. J.
Guthery Machine Tool Corp., 30—31 Crescent St., Long Island City 1, N. Y.
Guyan Machinery Co., Box 150, Logan, W. Va.

H

H & M Pipe Beveling Machine Co., 311 East Third St., Tulsa, Okla.
Haas Miller Corp., Fourth & Bristol Streets, Philadelphia 40, Pa.
Hallwell Tool Co., 606 S. Hill St., Los Angeles 14 Calif.
Halpering Co., Inc., A. F., 75-87 Northampton St., Boston 18, Mass.
Hamilton, Alexander Inst., 71 W. 23rd St., New York 10, N. Y.
Hamilton Tool Co., 9th & Hanover Sts., Hamilton, Ohio.

Hammon Precision Equipment Co., 1127 57th Ave., Oakland 21, Calif.
Hammett Elec. Mfg. Co., 706 E. 18th St., Kansas City 8, Mo.
Hammer Blow Tool Co., 602½ Third St., P.O. Box 419 Wausau, Wis
Hammond Associates Inc., The, Suite 3022, Empire State Bldg., N. Y. 1, N. Y.
Hammond Machinery Builders Inc., 1628 Douglas Ave., Kalamazoo, Mich.
Hancock Valve Div., Manning Maxwell & Moore Inc., Bridgeport, Conn.
Handy & Harman, 82 Fulton St., New York 38, N. Y.
Hankison Corp., College & Pike, Canonburg, Pa.
Hanna Engineering Works, 1765 North Elston Ave., Chicago 22, Ill.
Hannifin Corp., Des Plaines, Ill.
Hanover Glove Co., 2-6 Exchange Pl., Hanover, Pa.
Hansen, S. A., Co., 58 Frelinghuysen Ave., Newark 5, N. J.
Hanson-Van Winkle-Munning Co., Matawan, N. J.
Harbison Walker Refractories Co., 1800 Farmers Bank Bldg. Pittsburgh, Pa.
Hardie Engrg. Co., Inc., P. O. Box 49, Roanoke, Va.
Hard-N-Tuff Corp., Box 275, Huntington, N. Y.
Harmo Tire & Rubber Corp., 518 Hammond Bldg., Detroit 26, Mich.
Harmon & Co., 919 N. Michigan Ave., Chicago, Ill.
Harnischfeger Corp., 4400 W. National Avenue, Milwaukee 46, Wis.
Harper Steel Co., 901 Oak St., Harper, Kan.
Harrisburg Steel Co., Div. of Harsco Corp., 10th & Herr Sts., Harrisburg 15, Pa.
Harris Calorific Co., 5501 Cass Ave., Cleveland 2, Ohio.
Harris Service & Repair Corp., 178 Coit St., Irvington 11, N. J.
Harvey Aluminum Co., Torrance, Calif.
Har-Worth Mfg. Co., 744 Broad St., Newark 2, N. J.
Haskins, R. G. Co., 2651 West Harrison St., Chicago 12, Ill.
Hatfield Wire & Cable Div., Continental Steel Industries, Inc., Hillside, N. J.
Hauck Mfg. Co. 124-136 10th St., Brooklyn 15, N. Y.
Hayes, C. I., Inc., 800 Wellington Ave., Cranston 10, R. I.
Hayes Truck Appliance Co., Richmond, Ind.
Haygood Co., 1931 Plank Rd., Baton Rouge, La.
Haynes Stellite Co., A Div. of Union Carbide Corp., 52 Lindsay St., Kokomo, Ind.
Hays Mfg. Co., 12th & Liberty Streets, Erie 6, Pa.
Hazard Insulated Wire Works Div. of the Okonite Co., 72 Hazle St., Wilkes Barre Pa.
Hazard Wire Rope Div. of American Chain & Cable Co., Inc., 271 S. Pennsylvania Ave., Wilkes-Barre, Pa.
Heath Engineering Co., 209 Jefferson St., P. O. Box 69, Ft. Collins, Colo.
Hebard, W. F. & Co., 623 S. Winchester, Chicago, Ill.
Heffner Products, 2338 Brooklyn Rd., Jackson, Mich.
Heller Tool Co., Newcomerstown, Ohio
Helmco, Inc., 7400 W. Lawrence Ave. Chicago 31, Ill.
Henry Disston Div.—See Carlson Rules & Measures.
Herbrand Tools, Stone & Lake Sts., Fremont, Ohio.
Hercules Chemical Co., Inc., 332 Canal St., New York 13, N. Y.
Herrick, C. B. Mfg. Corp., 2000 Center St., Cleveland 13, Ohio.
Heston & Anderson, 608 W. Kirkwood St., Fairfield, Iowa.
Hewitt-Robins, Inc., 666 Glenbrook Road, Stamford, Conn.
Hevi Duty Elec. Co., 4212 W. Highland Blvd., Milwaukee 1, Wis.
Hewlett Packard Co., 367 Addison Ave., Palo Alto, Calif.
Hexacon Electric Co., 161 W. Clay Ave., Roselle Park, N. J.
High Vacuum Corp., 2 Churchill Rd., Hingham, Mass.
High Voltage Engineering Corp., Burlington, Mass.
Hi-Grade Alloy Corp., 1236 S. Talman Ave., Chicago 8, Ill.
Hirst Electronic Develop., Ltd., Dermody Rd., Lewisham, London S.E., England.
Hisey-Wolf Machine Co., Galvin & Mt. Hope Aves., Cincinnati 4, Ohio.
Hobart Brothers Co. Hobart Sq., Troy 1, Ohio.
Hoeganaes Sponge Iron Corp., Riverton, N. J.
Hoffman, Robert W., Co., Inc., 5250 W. Kinzie, Chicago 44, Ill.
Hoke Inc., P. O. Box 78, Cresskill, N. J.
Holcomb Safety Garment Co., 128 N. Jefferson St., Chicago 2, Ill.
Holcroft & Co., 6545 Epworth Blvd., Detroit 10 Mich.
Hollands Mfg. Co., 350 E. 18th St. Erie, Pa.
Hollingshead, R. M., Corp., 840 Cooper St., Camden, N. J.
Holmes, Robert, & Bros., Inc., 510 Junction Ave., Danville, Ill.
Holth Mfg. Co., Port Huron, Mich.
Holub Industries, Inc., Sycamore Ill.
Homalite Corp., The, 11-13 Brookside Dr., Wilmington 4, Del.
Home Rubber Co., 30 Wolverton Ave., Trenton 5, N. J.
Hones, Charles A., Inc., 146 Grand Ave., Baldwin, L. I., N. Y.
Hoof Products Co., 6543 S. Laramie Ave., Chicago 38, Ill.
Hoosier Tarpaulin & Canvas Goods Co., Inc., 1302 West Washington St., Indianapolis 6, Ind.
Hope Natural Gas Co., 445 W. Main St., Clarksburg, W. Va.
Hose Accessories Co., 17th & Lehigh Ave., Philadelphia 32, Pa.
Hoskins Mfg. Co., 4445 Lawton Ave., Detroit 8, Mich.
Hossfeld Mfg. Co., 460-462 W. 3rd St., Winona, Minn.
Houghton, E. F., & Co. 303 W. Lehigh Ave., Phila. 33, Pa.
Houston Oxygen Co., Inc., 3602 W. 11 St., Houston 8, Texas.
Howard Industries, Inc., Racine, Wis.
Hunt Valve Co., 1900 E. Pershing St., Salem, Ohio.
Hunt, Robert W., Co., 59 Murray St., N. Y. 7, N. Y.
Hurbenium Co., Napoleon, Ohio.
Hydraulic Press Mfg. Co., The, Marion Rd., Mt. Gilead, Ohio.

I

Ideal Electric & Mfg. Co., Mansfield, Ohio.
Ideal Industries, Inc., 1935 Park Ave., Sycamore, Ill.
Ilg Electric Ventilating Co., 2850 N. Pulaski, Chicago 41, Ill.
Illinois Iron & Bolt Co., 10 Main St., Carpentersville, Ill.
Illium Corp., The, P. O. Box 478, Freeport, Ill.
Imperial Brass Mfg. Co., The, 1200 W. Harrison St., Chicago 7, Ill.
Imperial Glove Co., 285 S. W. Franklin St., Berlin, Wis.
Independent Engrg. Co., Inc., O'Fallon 5, Ill.
Independent Metal Products Co., 11th and Grace, Omaha, Neb.
Independent Oxygen Manufacturers' Association, 200 Paul Ave., San Francisco 24, Calif.
Indiana Oxygen Co., 435 S. Delaware St., Indianapolis 25, Ind.
Indiana Steel Products Co., The, Valparaiso, Ind.
Indianapolis Brush & Broom Mfg. Co., Corner Brush & Broom St., Indianapolis 7, Ind.
Induction Heating Corp., 181 Wythe Ave., Brooklyn 11, N. Y.
Industrial Air Products Co., 3200 N.W. Yeon Ave., Portland 10, Ore.
Industrial Bench & Equip. Mfg. Co., Inc., 98 South St., New Britain, Conn.
Industrial Corp., Baltimore Life Bldg., Baltimore 1 Md.
Industrial Develop. & Mfg. Corp., Needham, Mass.
Industrial Engr., 4268 Shenandoah Ave., St. Louis 10, Mo.
Industrial Equip Co., 315 N. Ada St., Chicago 7, Ill.
Industrial Gloves Co., 700 Garfield St., Danville, Ill.
Industrial Metal Protectives, Inc., 401 Homestead Ave., Dayton 8 Ohio.
Industrial Overlay Metals, Inc., 410 N. Barron St., Eaton, Ohio.
Industrial Press, The, 148 Lafayette St., N. Y. 13, N. Y.
Industrial Products Co., 2802 N. Fourth St., Philadelphia 33, Pa.
Industrial & Utilities Specialty Co., Chattanooga, Tenn.
Industrial Welding Services, 7737 Old 3rd St., Louisville 14, Ky.
Industriline, Inc., 441 Lexington Ave., New York, N. Y. (Factory in Cincinnati, Ohio).
Ind-X Corp., 115 Belmont Ave., N., Seattle 2, Wash.
Ingersoll-Rand Co., 11 Broadway, N. Y. 4, N. Y.
Ingersoll Steel Div., Borg-Warner Corp., 310 S. Michigan Ave. Chicago 4, Ill.
Inland Steel Co., 30 W. Monroe St., Chicago 3, Ill.
Innis, Speiden & Co., 117 Liberty St., New York, N. Y.
Insto-Gas Corp., 998 E. Woodbridge St., Detroit 7, Mich.
Instrument Control Co., 1554 Macollet Ave., Minneapolis, Minn.
Insulrock Corp., East Linden Ave., Linden N. J.
International Acetylene Ass'n., 30 E. 42nd St., New York 17, N. Y.
International Chain & Mfg. Co., York, Pa.
International Correspondence Schools, Scranton 15, Pa.
International Fermont Machinery Co., Inc., Ramapo, N. Y.
International Nickel Co., Inc., The, 67 Wall St., N. Y. 5, N. Y.
International Rectifier Corp., 1521 E. Grand Ave. El Segundo, Calif.
International Register Co., 2620 W. Washington Blvd., Chicago 11, Ill.
International Salt Co., Inc., Scranton Life Bldg., Scranton 3, Pa.
International Shoe Co., Hy-Test Div., 1509 Washington St., St. Louis 3, Mo.
International Textbook Co., 1001 Wyoming Ave., Scranton 9, Pa.
Interstate Machinery Co., 1431 W. Pershing Rd., Chicago 9, Ill.
Interstate Sales Co. 123 E. 18th St., New York 3, N. Y.
Intertectics, Inc., Northfield & Forbes Rds., Bedford, Ohio.
Invincible Vacuum Cleaner Mfg. Co., 14th & Davis St., Dover, Ohio.
Ions Exchange Corp., 44 Leonard St., New York 13, N. Y.
Iron Lung Ventilator Co., 5403 Prospect Ave., Cleveland 3, Ohio.

J

Jackson Products, Div. of Air Reduction Co., Inc., 31739 Mound Rd., Warren, Mich.
J & S Tool Co., Inc. 1104 Route 10, Livingston, N. J.
Janos Asbestos Co., 39 Cortlandt St., New York 7, N. Y.
Jarvis, Charles L., Co., Pease Ave. & Stack St., Middletown, Conn.
Jefferson Engineering & Mfg. Co., 269 Walker St., Detroit 7, Mich.
Jefferson Mfg. Co., The, 800 N. 4th St., Columbus 16, Ohio.
Jergens Tool Specialty Co., 712 E. 163rd St., Cleveland 10, Ohio.
Jessop Steel Co., 500 Green St., Washington, Pa.
Jewel Mfg. Co., 1841 University Ave., St. Paul 4, Minn.
Jiffy Disintegrators, Inc., 109 E. Nine Mile Rd., Detroit, Mich.
Johns-Manville Corp., 22 E. 40th St., New York 16, N. Y.
Johnson Bronze Co., 535 S. Mill St., New Castle, Pa.
Johnson Gas Appliance Co., 520 E. Ave., N. W., Cedar Rapids, Iowa.
Johnson Machine Works, Eau Claire, Wis.
Johnson Mfg. Co., Inc., 616 First Ave. N., Mt. Vernon 3, Iowa.
Johnson Mfg. Corp., 1013 Barnes St., Albion, Mich.
Johnson-March Corp., The, 1724 Chestnut St., Philadelphia, Pa.
Johnson Steel & Wire Co., Inc., 55 Wiser Ave., Worcester 7, Mass.
Johnson-Williams, Inc., Palo Alto, Calif.
Johnston, A. P., 1845 E. 57th St., Los Angeles 11, Calif.
Johnston & Funk Titanium Corp., Wooster, Ohio
Jones Engineering Co. 523 Spring St., Ellwood City, Pa.
Jones, C. Walker, Co., 6125 N. Lambert St., Phila. 38, Pa.
Jones, Howard B., Div., Cinch Mfg. Corp., 1026 S. Homan Ave., Chicago 24, Ill.
Jones, Jimmie, Co., The, 1016 E. 4th St., Tulsa 20, Okla.
Jones & Laughlin Steel Corp., Third Ave. & Ross St., Pittsburgh 30, Pa.
Jordan Co., Inc., 3235 W. Hampton Ave., Milwaukee 9, Wis.
Jordan Industrial Sales Div. of OPW Corp., 6013 Wiehe Rd., Cincinnati 13, Ohio.
Joy Mfg. Co., Henry W., Oliver Bldg., Pittsburgh 22, Pa.
Junkin Safety Appliance Co., Inc., 101 S. Floyd St., Louisville 2, Ky.
Justrite Mfg. Co., 2061 N. Southport Ave., Chicago 14, Ill.

K

KSM Products, Inc., Yale & Woodland Aves., Merchantville 8, N. J.
Kaiser Aluminum & Chemical Corp., 1924 Broadway, Oakland 12, Calif.
Kano Laboratories, 1000 S. Thompson Lane, Nashville 11, Tenn.
Kansas Oxygen, Inc., P.O. Box 551, 126½ N. Main St., Hutchinson, Kan.
Kapp Alloy & Wire Co., R.D. #2, Box 172, Franklin, Pa.
Karma Mfg. Co., 14823 Loomis St., Harvey, Ill.
Kasson Die & Motor Corp., 32-14 Northern Blvd., Long Island City 1, N. Y.
Koto Engrg Co., Mankato, Minn.
Keasbey & Mattison Co., Ambler, Pa.
Keaton Mfg. Co., 3912 W. Vliet St., Milwaukee 8, Wis.
Kedman Co., 233 S. 5th W. St., Salt Lake City 1, Utah.
Kelite Products, Inc., P. O. Box 2917, Term. Annex, Los Angeles 54, Calif.
Keller Tool Co., 1333 Fulton St., Grand Haven, Mich.
Kelley Koett Mfg. Co., The, 212 W. 4th St., Covington, Ky.
Kellogg Div. of The Amer. Brake Shoe Co., 97 Humboldt St., Rochester 9, N. Y.
Kellogg, M. W., Co., 711 Third Ave., New York, N. Y.
Kelly, Robert J. Mfg. Co., P. O. Box 4938, Redford Sta., Detroit 19, Mich.
Kemode Co., The, 161 W. 18th St., New York 11, N. Y.
Kenco, 10081 Carmen Rd., Cupertino, Calif.
Kenco Mfg. Co., 5211 Telegraph Rd., Los Angeles 22, Calif.
Kennametal, Inc., 1000 Lloyd Ave., Latrobe, Pa.
Ken-Rad Tube & Lamp Corp., Owensboro, Ky.
Kent Co., Inc., The, 357 Canal St., Rome, N. Y.
Kerotest Mfg. Co., 2525 Liberty Ave., Pittsburgh 22, Pa.
Kester Solder Co. 4201 Wrightwood Ave., Chicago 93, Ill.
Kett Tool Co., 5055 Madison Rd., Cincinnati 27, Ohio.
Keuffel & Esser Co., Adams & 3rd Sts., Hoboken, N. J.
Keystone Carbon Co., 1935 State St., St. Marys, Pa.
K-G Equipment Co., Inc., 1744 Lehigh St., P. O. Box 512, Allentown, Pa.
Kidde, Walter & Co., Inc., 697 Main St., Belleville 9, N. J.
Kidder Mfg. Co., Inc., J. F., 426 Colchester Ave., Burlington, Vt.
Kimball Safety Prod. Co., 9310 Wade Park Ave., Cleveland 6, Ohio
King, Andrew, 67 E. Lancaster Ave., Ardmore, Pa.

Kirkhof Mfg. Corp., 2450 Buchanan Ave., S. W., Grand Rapids, Mich.
Kirschner Gloves, Inc., 239 Superior Ave., Oconto Wis.
Klein, Mathias, & Sons, 3200 Belmont Ave. Chicago 18, Ill.
Klem Chemicals, Inc., 14401 Lanson, Dearborn, Mich.
Klenk, Karl, 107 E. 5th St., Wilmington 1, Del.
Klemp Metal Grating Corp., 6603 S. Melvina Ave., Chicago 38, Ill.
Kling Bros. Engrg. Works 1308 N. Kostner Ave., Chicago 51, Ill.
Knox Mfg. Co., 819 Cherry St., Philadelphia 7, Pa. St., Utica 4, N. Y.
Koldweld Div., Kelsey Hayes Inc., 2407 Whitesboro
Koppers Co., Inc., Tar Products Div., Wailes Dove Hermiston, Inc., 449 S. Ave., Westfield, N. J.
Korn Leather Co., Peabody, Mass.
Kraeuter & Co., Inc., 585 18th Ave., Newark 3, N. J.
Krembs & Co., 669 W. Ohio St., Chicago 10, Ill.
Krieg, Charles W., Co., 48-60 Dickerson St., Newark 4, N. J.
Kriewaldt Glove Mfg. Co., 1136 Main St., Oconto, Wis.
Krohn Mfg. & Supply Co., Centreville, Mich.
Kropp Forge Co., 5301 W. Roosevelt Rd., Chicago 50, Ill.
Kunkle Valve Co., 121 S. Clinton St., Ft. Wayne 2, Ind.
Kwikheat Mfg. Co., 3732 San Fernando Rd., Glendale 4, Calif.

L

L & B Welding Equipment, Inc., 2424 Sixth St., Berkeley 2, Calif.
Laclede-Christy Co., 1711 Ambassador Bldg., St. Louis 1, Mo.
Ladish Co., 5481 S. Packard Ave., Cudahy, Wis.
Lake Chemical Co., 3052 W. Carroll Ave., Chicago 12, Ill.
Lamson & Sessions Co., 3101 27th Ave., N., Birmingham, Ala.
Langevin Mfg. Corp., 47-37 Austell Pl., Long Island City 1, N. Y.
Lapeer Mfg. Co., 1149 W. Baltimore, Detroit 2, Mich.
Laramy Products Co., 90 South St., Hingham, Mass.
LaPine & Co., Arthur S., 6001 S. Knox Ave., Chicago 29, Ill.
Larkin Welder & Machine Corp., 103 20th, Brooklyn, N. Y.
Last Word Sales Co., 18500 Mt. Elliott, Detroit 34 Mich.
Laughlin, Thomas Co., The, 143 Fore St., Portland 6, Me.
Layne-Held Corp., 114 W. 19th St., Higginsville, Mo.
Le Jay Mfg. Co., 2900 Emerson Ave., S., Minneapolis 8, Minn.
Lee, K. O., Co., 1110 First Ave. S.E., Aberdeen, S. D.
Lee, R. E., 369 Junipero Ave., Long Beach, Calif.
Lee Rubber & Tire Corp., Albert St., Youngstown 1, Ohio
Leetonia Tool Co., The, 142 Main St., Leetonia Ohio
Lehigh Foundries, Inc., Air Control Div., 1500 Lehigh Dr., Easton, Pa.
Lehigh Safety Shoe Co., Race & Court St., Allentown, Pa.
Lenape Hydraulic Pressing & Forging Co., Box 536, West Chester, Pa.
Lenco, Inc., 350 W. Adams St., Jackson 3, Mo.
Lepel High Frequency Lab. Inc., 55th St. & 37th Ave., Woodside 77, New York N. Y.
Leslie Co., 394 Delafield Ave., Lyndhurst, N. J.
Lewis Machine Co., The, 3441 E. 76th St., Cleveland 27, Ohio
Lewis Welding & Engrg. Corp., 100 Northfield Rd., Bedford, Ohio
Lexsuco, Inc., 4815 Lexington, Clevedland, Ohio
Liberty Leasing Corp., 341 Madison Ave., New York, N. Y.
Lichtman & Sons, 241 Frelinghuysen Ave., Newark 5, N. Y.
Lignum Vitae Products Corp., 96 Boyd St., Jersey City, N. J.
Lincoln Elec. Co., The, 22801 St. Clair Ave., Cleveland 17, Ohio
Lincoln Engineering Co., 5701 Natural Bridge Ave., St. Louis 20, Mo.
Lindberg Engineering Co., 2450 W. Hubbard St., Chicago 12, Ill.
Linde Co., A Div. of Union Carbide Corp., 30 E. 42nd St., New York 17, N. Y.
Line-O-Tool Co., 1927 Bank of the Southwest, Houston 2, Texas.
Link, O. P., Handle Co., 1st, 2nd & 3rd Sts., Salem, Ind.
Link Welder Corp., 13684 W. Buena Vista, Detroit 27, Mich.
Liquid Carbonic Div., General Dynamics Corp., 135 La Salle St., Chicago 3, Ill. & 2771 South Maple Ave., Fresno, Calif.
Livesay Industries, Inc., 141 San Lorenzo, Coral Gables, Fla.
Livingston Electronics Co., Essex Falls, N. J.
Lockrey Co., Lubricants Div., Southampton, N. Y.
Lonergan, J. E., Co., 2nd & Race Sts., Philadelphia 6, Pa.
Louisville Cap Co., 30th & Jefferson Sts., Louisville 12, Ky.
Lovell Chemical Co., Watertown 72, Mass.
Lucas-Milhaupt Engineering Co., 5051 S. Lake Dr., Cudahy, Wis.
Lufkin Rule Co., 1730 Hess St., Saginaw, Mich.
Lukens Steel Co., First Ave., Coatesville, Pa.
Lummis Mfg. Co., 2242 E. Foothill, Pasadena, Calif.
Lunkenheimer Co., P. O. Box 360, Annex Sta., Cincinnati 14, Ohio
Lutz File & Tool Co., 3736 Montgomery Rd., Cincinnati 12, Ohio
Lyon Metal Products, Inc., 200 Madison Ave., Aurora, Ill.

Mc

McAn, Thom, Safety Shoe Div. of Melville Shoe Corp., 25 W. 43rd St., New York 18, N. Y.
McCabe Mfg. Co., 9 Water St., Lawrence, Mass.
McClary & Byers Equip. Co., 731 55th St., Oakland 9, Calif.
McDonald, B. F., Co., 5721 W. 96th St., Los Angeles 45, Calif.
McFerron-Myers Products Co., P. O. Box 2657, Cleveland, Ohio
McGill Mfg. Co., Inc., 259 Indiana Ave., Valparaiso, Ind.
McGonegal Mfg. Co., Railroad Ave. & Mozart St., East Rutherford, N. J.
McKay Co., The, 1005 Liberty Ave., Pittsburgh 22, Pa.
MacDermid, Inc., Waterbury 88, Conn.
MacDonald Co., Inc., The, 927 Valley Road, P. O. Box 1707, Reno, Nev.
MacLeod Co., The, 2232-2240 Bogen St., Cincinnati 22, Ohio
MacMillan Co., 60 Fifth Ave., New York 11, N. Y.

M

M-B Products, 46 Victor Ave., Detroit 3, Mich.
Machinery & Welder Corp., 1324 W. Fulton St., Chicago, Ill.
Machlett Laboratories, Inc., 1063 Hope St., Springdale, Conn.
Macklin Co., 2914 Wildwood Ave., Jackson, Mich.
Magnaflux Corp., 7342 W. Lawrence Ave., Chicago 31, Ill.
Magna Industrial Lens Co., The, Box 727, Holdenville, Okla.
Magne-Cast Tool Co., Inc., 4900 W. Madison St., Chicago 44, Ill.
Magnetic Tool Corp., 1955 Lafayette St., Santa Clara, Calif.
MagneTrode Corp., 1615 Main St., Kansas City 8, Mo.
Magnolia Metal Co., 18 W. Jersey St., Elizabeth 4, N. J.
Mahr Mfg. Co., Div. Diamond Iron Works, 1728 N. 2nd St., Minneapolis 11, Minn.
Maintenance Engrg. Corp., P.O. Box 10426, Pittsburgh 34, Pa.
Maitlen & Benson, Inc., 1395 Obispo Ave., Long Beach 4, Calif.
Makepeace Co., D. E., Div. of Union Plate & Wire Co., Pine & Dunham Sts., Attleboro, Mass.
Mallory, P. R., & Co., Inc., 3029 E. Washington St., Indianapolis 6, Ind.
Mallory-Sharon Metals Corp., Niles, Ohio.
A. Mamaux & Son, 120 Blvd. of the Allies, Pittsburgh 22, Pa.
Manco Mfg. Co., Washington Ave. & Grove Sts., Bradley, Ill.
M & T Welding Prods. Corp., 703 37th Ave., Oakland, Calif.
Manganese Steel Forge Co., Richmond St. & Castor Ave., Philadelphia 34, Pa.
Manhattan Rubber Div., Raybestos-Manhattan, Inc., 42 Townsend St., Passaic, N. J.
Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Div., Broadway & Park Ave., Muskegon, Mich.
Mansol Ceramics Co., 140 Little St., Belleville, N. J.
Manual Arts Press Co., 237 N. Monroe St., Peoria 3, Ill.
Manufacturer's Brush Co., The, 12501 Elmwood Ave., Cleveland 11, Ohio
Manufacturers Processing Co., 1360 Hilton Rd., Detroit 20, Mich.
Marcus Transformer Co., Inc., Rahway, N. J.
Marindus Co., The, 51 Pine St., New York, N. Y.
Marion Electrical Instrument Co., Grenier Field, Manchester, N. H.
Marison Co., The, Mill & River Sts., P. O. Box 178, South Elgin, Ill.
Markal Co., 3052 W. Carroll Ave., Chicago 12, Ill.
Market Forge Co., 27 Garvey St., Everett 49, Mass.
Marks Oxygen Co., 1815 Fifteenth St., Augusta, Ga.,
Marquette Mfg. Co., Inc., 307 E. Hennepin Ave., Minneapolis 14, Minn.
Marsh, Jas. P., Corp., 3501 Howard St., Skokie, Ill.
Martin Electric Co., 3040 E. Outer Dr., Detroit 34, Mich.
Marvel Industries, Inc., 25 Buick St., Boston 15, Mass.
Massillon Refractories Co., The, P. O. Box 557, Massillon, Ohio
Master Electric Co., Div. of Reliance Elec. & Engrg Co., 126 Davis Ave., Dayton 1, Ohio.
Master Pneumatic Tool Co., Inc., 148 Peniman Rd., Orwell, Ohio
Master Rule Mfg. Co., Inc., 40 Mulberry St., Middletown, N. Y.
Master Vibrator Co., 200 Davis Ave., Dayton 1, Ohio
Matchless Utilities Co., 303 Cherry St., New York 2, N. Y.
Matheson Co., Inc., P. O. Box 85, East Rutherford, N. J.
Mathey, C. A., Machine Workes, Inc., 212 So. Frankfort, Box 1159, Tulsa, Okla.
Maurath, Inc., 21800 Miles Ave., Cleveland 22, Ohio
Mayhew Steel Products, Inc., Sears St., Shelburne Falls, Mass.
Mechanics Engrg. Co., Inc., 229 W. Pearl St., Box 243, Jackson, Mich.
Meco Welding Supply Co., 4835 S. Western Blvd., Chicago 9, Ill.
Medart Co., 100 Potomac St., St. Louis 18, Mo.
Merit Co., 2124 W. Chicago Ave., Chicago, Ill.
Merit Products, Inc., 3691 Lenawee, Los Angeles 16, Calif.
Merrill Bros., Inc., 56-81 Arnold Ave., Maspeth 78, N. Y.
Merix Chemical Co., 1021 E. 55th St., Chicago 15, Ill.
Messer Cutting Machines, Inc., 405 Lexington Ave., New York 17, N. Y.
Metal Bond Mfg. Co., P. O. Box 215, Montgomery City, Mo.
Metal Removal Co., 1801 Columbia Ave., Chicago 26, Ill.
Metal & Thermit Corp., (executive offices) 100 Park Ave., New York 17, N. Y.; (product div.), Rahway, N. J.
Metallizing Co. of America, 3520 W. Carroll Ave., Chicago 24, Ill.
Metallizing Engineering Co., Inc., 1101 Prospect Ave., Westbury, Long Island, N. Y.
Metalloy Products Co., 1233 S. Boyle Ave., Los Angeles 23, Calif.
Metalspray Co., Inc., 114 W. Elmyra St., Los Angeles, Calif.
Metalweld, Inc., Philadelphia 29, Pa.
Met-L-Chek Co., The, 11919 S. Western Ave., Los Angeles, Calif.
Metro Mfg. Co., 38-11 31st St., Long Island City 1, N. Y.
Metron Instrument Co., 432 Lincoln St., Denver 9, Colo.
Mexico Refractories Co., Cole & Love Sts., Mexico, Mo.
Miami Specialties Co., Trade Rd., Troy, Ohio.
Michigan Abrasive Co., 11900 E. 8 Mile Rd., Detroit, Michigan.
Michigan Clamp Co., Box 243, Jackson, Mich.
Michigan Steel Casting Co., 1999 Guoin St., Detroit 7, Mich.
Michigan Steel Tube Products Co., 9450 Buffalo St., Detroit 12, Mich.
Micro Products Co., 20 N. Wacker Dr., Chicago 6, Ill.
Middlesex Paper Tube Co., Inc., 345 Chelmsford St., Lowell, Mass.
Midland Paint & Varnish Co., The, 3801 E. 91st St., Cleveland 5, Ohio.
Mid-States Welder Mfg. Co., 6025 S. Ashland Ave., Chicago 36, Ill.
Mid West Abrasive Co., 500 S. Washington St., Owosso, Mich.
Midwest Piping & Supply Co., Inc., 1450 S. 2nd St., St. Louis 4, Mo.
Milburn, Alexander, Inc., 1231-45 Ridgely St., Baltimore 30, Md.
Milburn Co., 3246 E. Woodbridge, Detroit 7, Mich.
Miles, John R. R., Inc., 214 4th Ave., S. E., Minneapolis 15, Minn.
Miller Co., The, Meriden, Conn.
Miller Electric Mfg. Co., 718 S. Bounds St., Appleton, Wis.
Miller Fluid Power Co., 2040 N. Hawthorne Ave., Melrose Park, Ill.
Miller, Harry, Corp., 4th & Bristol Sts., Philadelphia, Pa.
Miller-Peerless Mfg. Co., 452 N. Sangamon St., Chicago 22, Ill.
Miller Products Co., Inc., 29 Warren St., New York 7, N. Y.
Millers Falls Co., 57 Wells St., Greenfield, Mass.
Milwaukee Brush Mfg. Co., The, 2236 N. 30th St., Milwaukee 45, Wis.
Milwaukee Elec. Tool Corp., 5316 W. State St., Milwaukee 8, Wis.
Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa.
Minneapolis Honeywell Reg. Co., Industrial Div., Wayne & Windrim Aves., Philadelphia 44, Pa.
Minnesota Mining & Mfg. Co., 900 Bush Ave., St. Paul 6, Minn.
Mir-O-Col Alloy Co., Inc., 312 N. Ave. 21, Los Angeles 31, Calif.
Misener Manufacturing Co., Inc., 202-8 S. Walton St., Syracuse, N. Y.
Mississippi Valley Struct. Steel Co., 3117 Big Bend Rd., St. Louis, Mo.
Mitchell Radiation Prods. Corp., 128 E. Washington St., Norristown, Pa.
Modern Engineering Co., Inc., 3411 Pine Blvd. St. Louis 3, Mo.
Monaghan, J. J. Co., Inc., 500 Alcott, Denver 4, Colo.
Montpelier Glove Co., Montpelier, Ind.
Mor-Amp Inc., Jackson, Mo.
Moore Corp., John B., P. O. Box 3, Nutley 10, N. J.
Morey Flux & Chem. Co., 1813 Williamson St., Wilmington 99, Del.
Morgan Aluminum Welding Rod Co., The, Mt. Carmel, Pa. Sales: 840 N. Michigan Ave., Chicago 11, Ill.
Morgan Vise Co., 108 N. Jefferson St., Chicago 6, Ill.
Morris, Wheeler & Co., Inc., Fox Street & Roberts Ave., Philadelphia 29, Pa.
Morrison Prod., Inc., 16816 Waterloo Road, Cleveland 10, Ohio
Morse Twist Drill & Machine Co., 163 Pleasant St., New Bedford, Mass.

Morton Manufacturing Co., Broadway & Hoyt, Muskegon Heights, Mich.
Morton Salt Co., 120 S. La Salle St., Chicago 3, Ill.
Moslo Machinery Co., 2443 Prospect Ave., Cleveland 15, Ohio
Motor Wheel Co., Lansing, Mich.
Mowatt, Geo. R., Co., 24 W. 40th St., N. Y. 18, N. Y.
Mueller Brass Co., 1925 Lapeer Ave., Port Huron, Mich.
Mueller Co., 512 W. Cerro Gordo St., Decatur, Ill.
Mueller Electric Co., 1583 E. 31st St., Cleveland 14, Ohio
Mulconroy Co., 54th & Jefferson St., Philadelphia 31, Pa.
Mullenbach Div., Worthington Corp., 2100 E. 27th St., Los Angeles 58, Calif.
Multi-Amp Corp., 465 Lehigh Ave., Union, N. J.
Multi-Hydromatic Welding & Mfg. Co., 23171 Groesbeck Hwy., E., Detroit, Mich.
Munton Mfg. Co., 9400 Belmont Ave., Franklin Park, Ill.
Murine Co., Inc., The, 660 N. Wabash Ave., Chicago 11, Ill.

N

Nadco Engineering, 3633 Brownsville Rd., Pittsburgh, Pa.
Nageldinger, John & Son, Inc., 366 East 153rd St., Bronx, N. Y.
Narda Ultrasonics Corp., 160 Herricks Rd., Mineola, L. I., N. Y.
National Cable Corp., 619 S. 70th St., Milwaukee 14, Wis.
National Carbide Co., Div., Air Reduction Co., Inc., 150 E. 42nd St., New York 17, N. Y.
National Carbon Co., Div. of Union Carbide & Carbon Corp., 30 E. 42nd St., New York 17, N. Y.
National Cooler Corp., 888 E. 70th, Cleveland 3, Ohio.
National Cylinder Gas, Div. of Chemetron Corp., 840 N. Michigan Ave., Chicago 11, Ill.
National Detailing Co., 4652 Echo Glen, Pittsburgh 36, Pa.
National Elec. Products Co., Two Gadeway Center, Pittsburgh 22, Pa.
National Elec. Weld. Mach. Co., 1846-1916 N. Trumbull St., Bay City, Mich.
National Electronics, Inc., 628 North Street, Geneva, Ill.
National Lead Co., 111 Broadway, Room 1815, New York 6, N. Y.
National Machine Tool Co., 1536 Clark St., Racine, Wis.
National Screw & Mfg. Co., Chester Hoist Div., The, Lisbon, Ohio
National Steel Corp., Ecorse, Detroit 18, Mich.
National Supply Co., 3320 Bishop St., Toledo 1, Ohio.
National Technical Products, Inc., 83-91 W. Forest Ave., Englewood, N. J.
National Technical Training Service, 260 Delaware Ave., Buffalo 2, N. Y.
National Time & Signal Corp., 21800 Wyoming Ave., Detroit 37, Mich.
National Torch Tip Co., Freeport Road, Pittsburgh 15, Pa.
National Tube Co., U. S. Steel Corp. Subsidiary, Frick Bldg., Pittsburgh 19, Pa.
National Twist Drill & Tool Co., Rochester, Mich.
National Ultrasonic Corp., 111 Montgomery Ave., Irvington, N. J.
National Welders Supply Co., Inc., P. O. Box 950, State & Gesco Sts., Charlotte 1, N. C.
National Welding Equipment Co., 218 Fremont St., San Francisco 5, Calif.
National Welding Supply Ass'n., 1900 Arch St., Philadelphia 3, Pa.
Naylor Pipe Co., 1230 E. 92nd St., Chicago 19, Ill.
Nedco Co., 27 Jones Rd., Box 405, Waltham 54, Mass.
Nelson, Herman, Div., Amer. Air Filter Co., Inc., 1824 Third Ave., Moline, Ill.
Nelson Stud Welding, Div. of Gregory Industries, Inc., E. 28th & Toledo Ave., Lorain, Ohio
Nelsonville Fdry. & Machine Co., 1021-81 Chestnut, Nelsonville, Ohio.
New Albany Welding Works, Inc., Jeffersonville, Ind.
New Britain Machine Co., South St., New Britain, Conn.
New England Gas Prdts., Inc., 27 West St., Charleston 29, Mass.
New Mexico Steel Co., 510 W. Marquette, Albuquerque, N. M.
New Era Engineering, 458 W. 29th St., Chicago 16, Ill.
New Rochelle Tool Corp., 322 Main St., New Rochelle, N. Y.
N. Y. Belting & Packing Co., 1 Market St., Passaic, N. J.
Newhall Chain Forge & Iron Co., 11 Orchard Rd., Park Ridge, N. J.
Newth Rubber Co., County Road, Barrington, R. I.
Niagara Machine & Tool Works, 637-697 Northland Ave., Buffalo 11, N. Y.
Nicholson File Co., 23 Acorn St., Providence 6, R. I.
Nickelson Tool & Die Co., Inc., 1107 South West St., Wichita, Kans.
Niles Fire Brick Co., 165 E. Park Ave., Niles, Ohio.
Norgren, C. A. Co., 3400 S. Elati, Englewood, Colo.
Norris-Thermador Corp., 5215 S. Boyle Ave., Los Angeles 58, Calif.
North American Philips Co., Inc., Elmet Division, Lisbon Road, Lewiston, Maine.
North American Philips, Philips Electronics, Inc., Instruments Div., 750 S. Fulton Ave., Mt. Vernon, N. Y.
North American Press, 728 N. 7th St., Milwaukee 1, Wis.
North American Refractories Co., 1012 National City Bank Bldg., Cleveland 14, Ohio.
Northeast Metals Co., 4124 Torresdale Ave., Philadelphia 24, Pa.
Northern Indiana Brass Co., 935 Plum St., Elkhart, Ind.
Northern Engineering Works, 2615 Atwater St., Detroit 7, Mich.
Northrop Aircraft, Inc., Hawthorne, Calif.
Northwest Chemical Co., 9310 Roselawn, Detroit, Mich.
Norton Co., 1 New Bond St., Worcester 6, Mass.
NRC Equipment Corp., 160 Charlemont St., Newton 61, Mass.
Nu-Jett Products Corp., 1355 Michigan Ave., N.E., Grand Rapids, Mich.
Nu-Matic Grinders, Inc., 8224 Carnegie Ave., Cleveland 3, Ohio.
Nu Steel Co., 1714 S. Ashland Ave., Chicago 8, Ill.
Nutt, The Buell W. Co., 11614 W. Pico Blvd., Los
Nyala Corp., 4035 Chestnut St., Philadelphia, Pa. Angeles 64, Calif.
Nye Tool & Machine Co., 4120 Fullerton Ave., Chicago 39, Ill.

O

OEM Corp., East Norwalk, Conn.
O. Z. Electrical Mfg. Co., Inc., 262 Bond St., Brooklyn 2, N. Y.
Oakite Products, Inc., 18 Rector St., New York 6, N. Y.
Ohio Brass Co., Mansfield, Ohio.
Ohio Chemical & Surgical Equip. Co., Div. of Air Reduction Co., 1400 E. Washington Ave., Madison, Wisc.
Ohio Carbon Co., The, 12508 Berea Rd., Cleveland 11, Ohio.
Ohio Crankshaft Co., Tocco Div., 3800 Harvard Ave., Cleveland 5, Ohio.
Ohio Injector Co., 200 S. Injector St., Wadsworth, Ohio.
Ohio Nut & Bolt Co., 25 First Ave., Berea, Ohio.
Ohio Seamless Tube Co., 132-140 W. Main St., Shelby, Ohio.
Ohlen Bishop Mfg. Co., 901 Ingleside Ave., Columbus 8, Ohio.
Ohmer, George H., P. O. Box 34, Sta. D, Dayton 10, Ohio.
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago 44, Ill.
Ohmstede Machine Works, 897-99 N. Main St., Beaumont, Tex.
Oilgear Co., The, 1560 W. Pierce St., Milwaukee, Wis.
Oklahoma Oxygen Co., 2750 Sand Spring Rd., P. O. Box 910, Tulsa 1, Okla.
Okonite Co., 946 Canal St., Passaic, N. J.
Olsen, Lester S., 505 W. Cherry St., Milwaukee 12, Wis.
Olympic Glove Co., 95 Madison Ave., New York 16, N. Y.
Omicron Co., The, 532 W. Windsor Rd., P. O. Box 907, Glendale 4, Calif.
Onan, D. W., & Sons, Inc., University Ave., S. E., at 25th, Minneapolis 14, Minn.
O'Neil-Irwin Mfg. Co., 300 8th Ave., Lake City, Minn.
Optimus Equipment Co., Matawan, N. J.
Ornamental Iron Assn., 385 Madison, Memphis, Tenn.
Osage Metal Co., Inc., 1413 S. Blackwelder Ave., P. O. Box 2445, Oklahoma City, Okla.
Osborn Mfg. Co., 5401 Hamilton Ave., Cleveland 14, Ohio.
Osmundson Spade Mfg. Co., 1524 Third St., Perry, Iowa.
Oster Mfg. Co., 2057 E. 61st Pl., Cleveland, Ohio.
Overbeke-Kain Co., 20905 Aurora Rd., Bedford, Ohio.
Owatonna Tool Co., 340 N. Cedar St., Owatonna, Minn.
Owen Electric Co., Fayetteville, N. C.
Oxford Tool Co., 1633-5-7 N. 2nd St., Philadelphia 22, Pa.
Oxigeno de Tampico, S. A., Apartado No. 770, Tampico, Tamps., Mexico.
Oxo Welding Equipment Co., Cedar and Oak Sts., New Lenox, Ill.

P

Paasche Airbrush Co., Div. of Cline Elec. Mfg. Co., 1909 Diversey Pkwy., Chicago 14, Ill.
Pacific Acetylene Co., 2205 Newton Ave., San Diego, Calif.
Pacific Carbide & Alloys Co., P. O. Box 5607, 9901 N. Hurst Ave. Portland 17, Ore.
Pacific Hardware & Steel Co., Inc., 106 Stockton Ave., San Jose, Calif.
Pacific Oxygen Co., 2205 Magnolia St., Oakland 7, Calif.
Pacific Transducer Corp., 11836 W. Pico Blvd., Los Angeles 64, Calif.
Pacific Welding Alloys Mfg. Co., 340 N. Avenue 21, Los Angeles 31, Calif.
Page Steel & Wire Div., American Chain & Cable Co., Inc., First & River Sts., Monessen, Pa.
Paine Co., The, 2 Westgate-Addison, Chicago, Ill.
Pako Corp., Minneapolis 11, Minn.
Pal-Weld Mfg. Co., 103 Lander St., Seattle 4, Wash.
Palmer Shile Co., 16000 Fullerton, Detroit, Mich.
Pandjiris Weldment Co., The, 5151 Northrup Ave., St. Louis 10, Mo.
Papec Machine Co., Shortville, N. Y.
Pangborn Corp., Hagerstown, Md.
Paranite Wire Cable Div., Essex Wire Corp., 1601 Wall St., Ft. Wayne 6, Ind.
Park Chemical Co., 8074 N. Military, Detroit, Mich.
Park Metalware Co., Orchard Park, N. Y.
Parker, Charles Co., 50 Hanover St., Meriden, Conn.
Parker Appliance Co., 17325 Euclid Ave., Cleveland 12, Ohio.
Parker Kalon Corp., American Transportation Corp., 1 Peekay Dr., Clifton, N. J.
Patrol Valve Co., 2310 Superior Ave., Cleveland 14, Ohio.
Paul C. Roche Co., Inc., 11 Park Place, New York 7, N. Y.
Paulsen Webber Cordage Corp., 170-176 John St., New York 7, N. Y.
Peck, Cecil C., Co., 14901-15 Woodworth Rd., Cleveland 10, Ohio.
Peck Clamp Co., 246—Fifth Ave., New York, N. Y.
Peck, Stow & Wilcox Co., 217 Center St., Southington, Conn.
Pedrick Tool & Mach. Co., 3640 N. Lawrence St., Philadelphia 40, Pa.
Peer Inc., 1200 Milton St., Benton Harbor, Mich.
Peerless Machine Co., 1600 Junction Ave., Racine, Wis.
Peninsular Grinding Wheel Co., 729 Meldrum Ave., Detroit 7, Mich.
Penn Tool & Machine Co., Danville, Ill.
Pennsalt Chemicals Corp., 3 Penn Center Plaza, Philadelphia 2, Pa.
Perfect Glove Co., Inc., 102 E. Walnut St., Milwaukee 12, Wis.
Perfection Stove Co., 7609 Platt Ave., Cleveland Ohio.
Permagile Corp. of America, The, New York, N.
Perma-latem Welding Alloys, Inc., 209 Patters Ave., Red Bank, N. J.
Peters-Dalton, Inc., 17902 Ryan Rd., Detroit 1 Mich.
Peterson Machine Tool Co., 6200 Merriam Ave., Merriam, Kan.
Petersen Mfg. Co., Dewitt, Neb.
Peterson Welding Laboratories, Inc., 1423 Virginia Ave., Kansas City 6, Mo.
Phelps Dodge Copper Products Corp., 300 Park Ave., New York 22, N. Y.
Philadelphia Chain Block & Mfg. Co., Inc., Mascher & Norris Sts., Philadelphia 22, Pa.
Philadelphia Quartz Co., 1146 Public Ledger Bldg., 6th & Chestnut Sts., Philadelphia 6, Pa.
Philips Electrical Ltd., Century House, Shaftesbury Ave., London W.C. 2, England.
Philips Electronics, Inc., Instruments Div., 750 S. Fulton Ave., Mt. Vernon, N. Y.
Phillips, C. E., & Co., 2750 Poplar St., Detroit 8, Mich.
Phillips Mfg. Co., 3475 Touhy Ave., Chicago 45, Ill.
Phoenix Products Co., 4715 N. 27th St., Milwaukee 9, Wis.
Phosphor Bronze Corp., 20 Franklin St., Seymour, Conn.
Photoswitch, Inc., 77 Broadway, Cambridge 42, Mass.
Photovolt Corp., 97 Madison Ave., New York 16, N. Y.
Picker X-Ray Corp., 25 S. Broadway, White Plains, N. Y.
Pickett & Eckel, Inc., 1109 S. Fremont Ave., Alhambra, Calif.
Pierce Governor Co., Inc., The, P.O. Box 1000, 1601 Ohio Ave., Anderson, Ind.
Pike Products, Inc., P. O. Box 28, Jackson, Mo.
Pilotrol Corp., P. O. Box 172, Springfield, N. J.
Pioneer Welding Mfg. Co., 934 2nd St., Kalamazoo, Mich.
Pipe Line Development Co., 5700 Detroit Ave., Cleveland 2, Ohio.
Pittsburgh Plate Glass Co., Brush Div., 3221 Frederick Ave., Baltimore 29, Md.
50, Pa.
Pittsburgh Steel Co., 1642 Grand Bldg., Pittsburgh Pittsburgh 12, Pa.
Pittsburgh Metals Purifying Co., 1352 Marvista St.,
Plastic Wire & Cable Co., 403 E. Main St., Jewett City, Conn.
Platz Co., Inc., 20433 Sherwood Ave., Detroit 34, Mich.
Plibrico Jointless Firebrick Co., 1800 Kingsbury St., Chicago 14, Ill.
Plomb Tool Co., 2209 Santa Fe Ave., Los Angeles 54, Calif.
Plumb, Fayette R., Inc., 4837 James St., Philadelphia 37, Pa.
Pocahontas Welding Supply Co., Bluefield, W. Va.
Poly Prods. Co., 230 E. Pomona Ave., Monrovia, Calif.
Portable Electric Tools, Inc., 320 W. 83 St., Chicago 20, Ill.
Porter-Cable Machine Co., 700 Marcellus St., Syracuse, N. Y.
Porter, C. O., Machinery Co., 666 Front Ave., Grand Rapids 7, Mich.
Porter, H. K., Inc., 74 Foley St., Somerville 43, Mass.
Porter, R. C., Co., 9354 Floral Ave., Cincinnati 42, Ohio.
Portomag, Inc., 1511 E. 9 Mile Rd., Ferndale 20, Mich.
Powder-Weld Process Co., 419 Kent Ave., Brooklyn 11, N. Y.
Powell, Wm., Co., 2525 Spring Grove Ave., Cincinnati 22, Ohio.
Prab Conveyors, Inc., 30121 Groesbeck Hwy., Roseville, Mich.
Pratt-Brayman Mfg. Co., Oscoda, Mich.

Pratt & Whitney Div., 1 Charter Oak Blvd., Niles-Bement-Pond Co., West Hartford 1, Conn.
Precision Electronic Research Co., Glendora, Calif.
Precision Grinding Wheel Co., Inc., 8301 Torresdale Ave., Philadelphia 36, Pa.
Precision Scientific Co., 1736-54 N. Springfield Ave., Chicago 47, Ill.
Precision Tool & Mfg. Co., 1305 S. Laramie, Cicero, Ill.
Precision Tool Sales, 417 E. Florence, Los Angeles, Calif.
Precision Welder & Flexopress Corp., 3520 Ibsen Ave., Cincinnati 9, Ohio.
Precision Welder Mfg. Co., 2218 W. Lake St., Chicago 12, Ill.
Prenco Prods., Inc., 507 E. 10 Mile Rd., Hazel Park, Mich.
Prentice Products Co., 5005 New Haven Ave., Fort Wayne, Ind.
Pressed Steel Tank Co., 1445 S. 66th St., Milwaukee 14, Wis.
Presstite Engrg. Co., 3900 Chouteau Ave., St. Louis 10, Mo.
Pressure Products Corp., Edgerton, Wis.
Pressure Products Co., West Chester, Pa.
Price & Rutzebeck Co., P. O. Box 30, Hayward, Calif.
Prier Brass Mfg. Co., 7719 15th St., Kansas City, Mo.
Production Devices, Inc., 80 Poultney St., Whitehall, N. Y.
Progressive Welder Sales Co., 915 Oakland Ave., Pontiac, Mich.
Pulmosan Safety Equip. Corp., 644 Pacific Street, Brooklyn 17, N. Y.
Punch-Lok Co., 321 N. Justine St., Chicago 25, Ill.
Pure Carbon Co., Inc., 441 Hall Ave., St. Mary's, Pa.
Pure Carbonic Co., Div. of Air Reduction Co., Inc., 150 E. 42nd St., New York 17, N. Y.
Puritan Compressed Gas Corp., 20th & Walnut Sts., Kansas City, Missouri.
Purity Cylinder Gases, Inc., 2580 28th St. S.W. (South Belt Line), Grand Rapids, Mich.
Purnell Alloy Co., P.O. Box 158, Angleton, Tex.
Pyle-National Co., 1334 N. Kostner Ave., Chicago 51, Ill.
Pynosol Laboratories, Inc., 1714 S. Ashland Ave., Chicago 8, Ill.
Pyramid Instrument Corp., 630 Merrick Rd., Lynbrook, N. Y.
Pyramid Steel Co., 4527 Hough Ave., Cleveland 3, Ohio.
Pyrene C-O-Two Div., U.S. Hwy. #1, P. O. Box 750, Newark 1, N. J.
Pyrene Mfg. Co., 560 Belmont Ave., Newark 8, N. J.
Pyrometer Service Co., Inc., 348 River Rd., North Arlington, N. J.

Q

Quadriga Mfg. Co., 213 W. Grand Ave., Chicago 10, Ill.
Quaker Chem. Prods. Corp., Elm & Lime Sts., Conshohocken, Pa.
Quaker Rubber Div., H. K. Porter, Inc., Tacony & Comly Sts., Philadelphia 24, Pa.
Quality Tools Corp., New Wilmington, Pa.
Quigley Co., Inc., 415 Madison St., New York 17, N. Y.
QuiJada Tool Co., Inc., 5474 Alhambra Ave., Los Angeles 32, Calif.

R

Rabin Glove Co., 407 Grove St., Jersey City, N. J.
Racine Glove Co., Inc., Box 38, Rio, Wis.
Racine Tool & Machine Co., 1760 State St., Racine, Wis.
Raco Engineering Service, 2116 Chestnut St., Alhambra, Calif.
Radiant Lamp Corp., 300 Jelliff Ave., Newark 8, N. J.
Radio Corp. of America, Camden, N. J.
Radio Corp. of America, R.C.A. Tube Dept., 415 S. 5th St., Harrison, N. J.
Radio Frequency Co., 44 Park St., Medfield, Mass.
Radson Engineering Corp., Macon, Ill.
Ragle, J. M. Industries, 2715 Oak St., Kansas City 8, Mo.
Railway Track Work Co., Clementine, Thompson & Mercer Sts., Philadelphia, Pa.
Randall Graphite Bearings, Inc., 207 E. Market, Lima, Ohio.
Randall Mfg. Co., 705-11 Virginia, Kansas City 6, Mo.
Randolph Laboratories, Inc., 8 E. Kinzie St., Chicago 11, Ill.
Rankin Mfg. Co., 616 Marengo Ave., P. O. Box 631, Alhambra 2, Calif.
Ransome Mfg. Co., 4030 Hollis St., Emeryville, Calif.
Rapid Electric Co., 2881 Middletown Rd., New York 61, N. Y.
Rapid Mfg. Co., Inc., 6305 San Fernando Rd., Glendale 1, Calif.
Rapiddesign, Inc., 111-B S. Orange St., Glendale 4, Calif.
Rasmussen Iron Works, 1007 W. Philadelphia St., Whittier, Calif.
Raybestos Manhattan, Inc., Manhattan Rubber Div., 61 Willett St., Passaic, N. J.
Raybestos-Manhattan, Inc., 42 Towsend St., Passaic, N. J.
Raytheon Mfg. Co., Equipment Sales Div., 100 River Street, Waltham 54, Mass.
Raymond Corp., 239-126 Madison St., Greene, N. Y.
Reade Mfg. Co., Inc., 125 Hoboken Ave., Jersey City 2, N. J.
Reading, Pratt & Cady Valve Div., American Chain & Cable Co., Inc., Reading, Pa.
Ready-Power Co., 11231 Freud Ave., Detroit, Mich.
Read Standard Corp., 370 Lexington Ave., New York 17, N. Y.
Red Devil Manufacturing Co., 1412 North Ogden Ave., Chicago 10, Ill.
Reed Mfg. Co., 1425 W. 8th St., Erie, Pa.
Reed Roller Bit Co., Cleco Div., 5125 Clinton Dr., Houston, Texas.
Rees, Mackworth G., Inc., 1573 E. Forest Ave., Detroit 7, Mich.
Regent, Jack, Mfg. Co., 11905 Regent View Ave., Downey, Calif.
Reid-Avery Co., Inc., The, Cleveland & Chesapeake Ave., Dundalk, Baltimore 22, Md.
Reiner & Campbell Co., Inc., 19 Euclid Ave., Newark, N. J.
Reltool Corp., 4540 W. Burnham St., Milwaukee 14, Wis.
Renfroe, J. C. & Sons, Inc., 1259 W. State St., Jacksonville 1, Fla.
Republic Drill & Tool Co., 322 S. Green St., Chicago, Ill.
Republic Rubber Div., Lee Rubber & Tire Corp., Albert St., Youngstown 1, Ohio.
Republic Steel Corp., Steel & Tubes Div., 224 East 131st St., Cleveland 8, Ohio
Research Engineering & Sales Co., 663 Thurston Rd., Rochester, N. Y.
Resistance Welder Corp., 116 First St., Bay City, Mich.
Resistance Welder Mfrs. Assn., 1900 Arch St., Philadelphia, Pa.
Resistance Welding Alloy Assn., 1900 Arch St., Philadelphia, Pa.
Resisto-Loy Co., 1251 Phillips Ave., S. W., Grand Rapids 7, Mich.
Revco, Inc., 1900 Lyndale Ave., S., Minneapolis, Minn.
Revere Copper & Brass, Inc., 230 Park Ave., New York 17, N. Y.
Revolvator Co., U. S. Route 1, North Bergen, N. J.
Reynolds Metals Co., 2500 S. 3rd St., Louisville 1, Ky.
Riegel Textile Corp., 260 Madison Ave., New York 16, N. Y. Industrial Glove Sales Div., Conover, N. C.
Richards, Arklay S., Co., Inc., 72 Winchester St., New Highlands 61, Mass.
Richards Wilcox Mfg. Co., 176 3rd St., Aurora, Ill.
Rice-Peterson Sales, Inc., P. O. Box 1114, Palo Alto, Calif.
Ridge Tool Co., 400 Clark St., Elyria, Ohio.
Riehle Testing Machines Div., American Machine & Metals, Inc., East Moline, Ill.
Riverside Iron & Engineering Works, Ltd., 803 24th Ave., S. E., Calgary, Alberta, Canada.
Riverside Metal Co., Riverside, Burlington Co., N. J.
Rivett Lathe & Grinder, Inc., 18 Riverview Road, Brighton 35, Boston, Mass.
Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield 99, Ohio.
Robertson, A. L., Inc., 325 S. Kresson St., Baltimore 24, Md.
Robertson Mfg. Co., S. Pennsylvania Ave. & Green St., Morrisville, Pa.
Robotron Corp., 21300 W. 8 Mile Rd., Detroit 19, Mich.
Robyon Backing Ring Co., 675 Garden St., Elizabeth, N. J.
Roche Co., Inc., Paul C., 11 Park Place, New York 7, N. Y.
Rockuber Corp., Rapid City, S. D.
Rockwell Mfg. Co., 454 N. Lexington Ave., Pittsburgh 8, Pa.
Roebling's Sons Corp., John A., 640 S. Broad St., Trenton 2, N. J.
Rolled Alloys, Inc., 4815 Bellevue, Detroit 7, Mich.
Rome Cable Corp., Ridge St., Rome, N. Y.
Ronald Press Co., 15 E. 26th St., New York 10, N. Y.
Roots Connersville Blower Corp., 900 W. Mount St., Connersville, Ind.
Ross Operating Valve Co., 120 E. Golden Gate Ave., Detroit 3, Mich.
Rotir Co., 8470 Garfield Blvd., Bell Garden, Calif.
Rotor Tool Co., The, 26300 Lakeland Blvd., Cleveland, Ohio.
Round David & Son, Aurora & Solon Rd., Cleveland 5, Ohio.
Roylyn, Inc., 1706 Standard Ave., Glendale 1, Calif.
Royson Engineering, Hatboro, Pa.
Rubber & Asbestos Corp., 225 Belleville Ave., Bloomfield, N. J.
Rubicon Co., Ridge Ave. at 35th St., Philadelphia, Pa.
Ruby Chemical Co., The, 68-70 McDowell St., Columbus 16, Ohio.
Ruemelin Mfg. Co., 3880 N. Palmer St., Milwaukee 12, Wis.
Rust-Oleum Corp., 2425 Oakton St., Evanston, Ill.
Rustless Iron & Steel Corp., Baltimore 13, Md.
Ryerson, J. T. & Son, Inc., 2558 West 16th St., P. O. Box 8000-A, Chicago 8, Ill.
Ryman Engineering Co., Inc., 523 Spring Ave., Elwood City, Pa.

S

S & L Mfg. Co., 1450 W. 174th St., Gardena, Calif.
S. C. Leather Co., 819 5th Ave., Pittsburgh 19, Pa.
S-M-S Corp., 8605 Livernois Ave., Detroit 14, Mich.
Sabine Oxygen Co., P. O. Box 756, Pt. Arthur, Texas.
Safety Clothing & Equip. Co., 1990 E. 69th St., Cleveland 3, Ohio
Safety First Supply Co., 425 Magee St., Pittsburgh 19, Pa.
Safety First Products Corp., Elmsford, N. Y.
Safety Gas Lighter Co., 56 Sanderson Ave., Lynn, Mass.
St. John X-Ray Lab., Califon, N. J.
St. Pierre Chain Corp., 50 Frank St., Worcester 4, Mass.
Salem Tool Co., 767 S. Ellsworth Ave., Salem, Ohio
Sales Service Mach. Tool Co., 2363 University Ave., St. Paul 14, Minn.
Salkover Metal Processing of Illinois, Inc., 2550 Edgington Ave., Franklin Park, Ill.
Salsbury Corp., 1161 E. Florence Ave., Los Angeles 1, Calif.
Sand-O-Flex Corp., 4377 Melrose Ave., Los Angeles 27, Calif.
Sandusky Abrasive Wheel Co., 623 W. Ransom St., Kalamazoo 18, Mich.
Sasgen Derrick Co., 3101 W. Grand Ave., Chicago 22, Ill.
Savage Industries, Inc., 2045 W. Cheryl Dr., Phoenix, Ariz.
Saxton Mfg. Co., 1517 N. Potrero., El Monte, Calif.
Saylor Beall Mfg. Co., St. John, Mich.
Scherr, George, Co., Inc., 200 Lafayette St., New York, N. Y.
Scheu Prod. Co., 297 E. Stowell, Upland, Calif.
Schmieg Industries, Inc., P. O. Box 4701, Detroit 34, Mich.
Schoenberger, J. W., Co., 8810 Harvard St., Cleveland, Ohio
Scholtz Engrg. Works, Waterloo, Iowa
Schott Metal Products Co., 2225 Lee Rd., Akron 6, Ohio.
Schrader's Son, A., Div. of Scovill Mfg. Co., Inc., 470 Vanderbilt Ave., Brooklyn 17, N. Y.
Schramm, Inc., Virginia & Garfield Aves., West Chester, Pa.
Schwerdtle Stamp Co., 166 Elm St., Bridgeport 3, Conn.
Sciaky Bros., Inc., 4915 W. 67th St., Chicago 38, Ill.
Scientific Electric, 119 Monroe St., Garfield, N. J.
Scientific Research Co., 1618 N. Vancouver Ave., Portland 12, Ore.
Scovill Mfg. Co., 99 Mill St., Waterbury 20, Conn.
Seal-Seat Co., 2326 Sawtelle Blvd., Los Angeles, Calif.
Seaman-Andwall Corp., Cogmatic Div., 13050 W. Bluemond Rd., Milwaukee 1, Wis.
Sears, Roebuck & Co., 925 S. Homan Ave., Chicago 7, Ill.
Security Valve Co., 541 W. Garfield, Glendale 4, Calif.
Seedorff, A. P., & Co., Inc., 4617 Cecelia St., Bell, Calif.
Seelye Craftsmen, Ind. Plastics Div., 984 Central Ave., Minneapolis, Minn.
Selas Corp. of America, Dresher, Pa.
Sellstrom Mfg. Co., 226 Hicks Rd., Palatine, Ill.
Service Machine Co., 156 Miller St., Elizabeth 4, N. J.
Severn Engineering Co., Inc., P.O. Box 944, Annapolis, Md.
Seymour Mfg. Co., The, 15 Franklin St., Seymour, Conn.
Shallcross Mfg. Co., Jackson & Pusey Aves., Collingdale, Pa.
Sharon Steel Corp., Sharon, Pa.
Shawinigan Products Corp., Empire State Bldg., 350 Fifth Ave., New York 1, N. Y.
Shepard-Niles Crane & Hoist Co., 472 Schuyler Ave., Montour Falls, N. Y.
Sherman & Co., 36-07 Prince St., Flushing, N. Y.
Sherman, H. B., Mfg. Co., 22 Barney St., Battle Creek, Mich.
Shieldalloy Corp., West Blvd., Newfield, N. J.
Shielded Stud Welding Co., 1540 Seabright Ave., Long Beach 13, Calif.
Shober, Inc., 900 W. Weber Ave., P. O. Box 1491, Stockton 1, Calif.
Shook Bronze Corp., Greenlawn & Lake Sts., Lima, Ohio
Shoot-A-Lite Corp., 75 West St., NYC 6, N. Y.
Shrader, F. W., Co., 5788 W. Washington Blvd., Culver City, Calif.
Sierra Oxygen Co., 1500 East Second St., Reno, Nev.
Sierra Welding Flux Co., P. O. Box 272, Temple City, Calif.
Siewek Tool Co., 2862 E. Grand Blvd., Detroit 2, Mich.
Sight Feed Generator Co., P. O. Box No. 38, West Alexandria, Ohio
Silent Glow Oil Burner Corp., 850 Windsor St., Hartford, Conn.
Silent Hoist & Crane Co., 841-877 63rd St., Brooklyn 20, N. Y.
Silicone Paper Co., of Amer., Inc., 230 Park Ave., New York, N. Y.
Simonds Abrasive Co., Tacony & Fraley Sts., Philadelphia 37, Pa.
Simonds Saw & Steel Co., 470 Main St., Fitchburg, Mass.
Simonds, Worden, White Co., Summit St. at Negley Pl., Dayton 7, Ohio
Simplex Wire & Cable Co., 79 Sidney St., Cambridge 39, Mass.
Simplicity Engineering Co., Durand, Mich.
Singer Glove Mfg. Co., 860 W. Weed St., Chicago 22, Ill.
Sittler Corp., 18 N. Ada St., Chicago 9, Ill.
Skil Corp., 5033 Elston Ave., Chicago 30, Ill.
Smith, A., & Son, Inc., 1239 Ridge Ave., Philadelphia 23, Pa.
Smith, A. O., Corp., 3533 N. 27th St., Milwaukee 1, Wis.
Smith Bros. & Hughes, 5304 Banks St., San Diego, Calif.

Smith, Gordon & Co., Inc., 348 College St., Bowling Green, Ky.
Smith, G. W., & Sons, Inc., 5400 Kemp Rd., Dayton 3, Ohio
Smith, Seymour, & Sons, Inc., Box 591, Oakville, Conn.
Smith Welding Equip. Corp., 2633 4th St., S. E., Minneapolis 14, Minn.
Smooth-On Mfg. Co., 572 Communipaw Ave., Jersey City 4, N. J.
So-Lo Works, Twight Wee Rd., Loveland, Ohio
Solar Aircraft Co., 2200 Pacific Hwy., San Diego 12, Calif.
Solo Horton Brush Co., Inc., 135 W. 19th St., New York 11, N. Y.
Solventol Chem. Prods., Inc., 15841 2nd Blvd., Detroit 3, Mich.
Sonneborn, L., Sons, Inc., 88 Lexington Ave., New York 16, N. Y.
Sonobond Corp., Subsidiary of Aeroprojects, Inc., 310 E. Rosedale Ave., West Chester, Pa.
Southern Oxygen Co., Inc., P. O. Box 5087, 2900 52nd St., Washington 19, D. C.
Southwest Welding & Mfg. Co., Alhambra, Calif.
Southwestern Industrial Electronics Co., 2831 Post Oak Rd., P. O. Box 13058, Houston 19, Texas.
Southwire Co., 7 Fertilla St., Carrollton, Georgia.
Spartan Saw Works, Inc., 152 Fisk Ave., Springfield 7, Mass.
Special Chemicals Corp., 100 S. Water St., Ossining, N. Y.
Special Engrg. Service, Inc., 8161 Livernois Ave., Detroit, Mich.
Specialty Coatings, Inc., 1085 Allegheny Ave., Oakmont, Pa.
Speedi-Burn Prods. Co., Inc., 534 Linden St., West Hempstead, N. Y.
Speedway Mfg. Co., 1834 S. 52nd Ave., Cicero 50, Ill.
Speer Carbon Co., Theresia St., St. Marys, Pa.
Spekaluminite Co., 100 S. Water St., Ossining, N. Y.
Sperry Products, Inc., Shelter Rock Road, Danbury, Conn.
Spincraft Inc., 4132 W. State St., Milwaukee, Wis.
Spra Rod Crop., 2795 E. 83rd St., Cleveland, Ohio.
Spring Specialty Co., 1219 W. Madison St., Maywood, Ill.
Square-D Co., Industrial Controller Div., 4041 N. Richards St., Milwaukee 12, Wis.
S-S Co., 830 Humboldt St., Brooklyn 22, N. Y.
Stackpole Carbon Co., Tannery, St. Marys, Pa.
Stahl Equipment Co., 94 Washington St., Brookline Village 46, Mass.
Standard Electrical Tool Co., 2488-96 River Rd., Cincinnati 4, Ohio
Standard Machinery Co., 1475 Elmswood Ave., Providence 7, R. I.
Standard Portable Cord Co., Inc., P. O. Box 141, Mayville, N. Y.
Standard Pressed Steel Co., Jenkintown 13, Pa.
Standard Research Inc., 460 Grand Ave., New Haven 13, Conn.
Standard Safety Equipment Co., 232 W. Ontario St., Chicago 10, Ill.
Standard Steel & Wire Co., Bolivar, Pa.
Standard Supply Co., 460 Grand Ave., New Haven 13, Conn.
Standard Tool Co., 3950 Chester Ave., Cleveland 14, Ohio
Standard Tube Co., 24400 Plymouth Rd., Detroit 39, Mich.
Standard X-Ray Co., 1932 N. Burling St., Chicago 14, Ill.
Stanley Elec. Tools, Div. of the Stanley Works, 480 Myrtle St., New Britain, Conn.
Stanley Tools, Div. of the Stanley Works, 111 Elm St., New Britain, Conn.
Star Mfg. Co., Div. of Illinois Iron & Bolt Co., Carpentersville, Ill.
Stark Mfg. Co., Tuscaloosa, Ala.
Starrett, L. S., Co., Athol, Mass.
Stearns Magnetic, Inc., 635 S. 28 St., Milwaukee 46, Wis.
Stearns, Roger, Mfg. Co., 1720 California St., Denver 2, Colo.
Steel City Testing Machines, Inc., 8817 Lyndon Ave., Detroit 38, Mich.
Steel & Tubes Div., Republic Steel Corp., 224 E. 131 St., Cleveland 8, Ohio
Steel Sales Corp., 3348 S. Pulaski Rd., Chicago 80, Ill.
Steele Gases, Inc., 1421 South Circle Ave., Forest Park, Ill.
Steffan Mfg. Corp., Box 275, Salem, Ohio.
Steiner-Ives Co., 689 Springfield Ave., Union, N. J.
Stephens-Adamson Mfg. Co., 9 Ridgeway Ave., Aurora, Ill.
Sterling Grinding Wheel Div. of The Cleveland Quarries Co., Tiffin, Ohio
Sterling Tool Products Co., 362 E. Ohio St., Chicago 11, Ill.
Stevens, C. H., & Co., Inc., Stevens Bldg., Corn wall Bridge, Conn.
Stevens-Walden, Inc., 475 Shrewsbury St., Worcester 4, Mass.
Stewart Iron Works Co., Inc., The, 1537 Stewart Block, Cincinnati 1, Ohio
Stewart Oxygen Co., 351 California St., San Francisco, Calif.
Stewart, Tark, Box 101, Worthington, Pa.
Stewart-Warner Corp., 1826 Diversey Pkwy., Chicago 14, Ill.
Stoody Co., 11984 E. Slauson Ave., Whittier, Calif.
Stop-Fire, Inc., P. O. Box 9, Monmouth Junction, N. J.
Stow Mfg. Co., 443 State St., Binghamton, N. Y.
Streichert, E. J., 1747 N. Crawford Ave., Chicago 39, Ill.
Struthers Wells Corp., 1003 Pennsylvania Ave., Warren, Pa.
Stryco Mfg. Co., 470 Natoma St., San Francisco 3, Calif.
Studebaker Machine Co., 1221 S. 9th Ave., Maywood, Ill.
Stulz-Sickles Co., 929 Julia St., Elizabeth, N. J.
Sturdi-Bilt Steel Prods., Inc., 2501 Peterson Ave., Chicago 45, Ill.
Sturtevant, B. F., Co., Div. of Westinghouse Elec., Hyde Park, Boston 36, Mass.
Sulfo, Inc., 1143 E. Jersey St., Elizabeth 4, N. J.
Sun Oil Co., 1608 Walnut St., Philadelphia 3, Pa.
Sunbury Wire Rope Mfg. Co., 880 S. 2nd St., Sunbury, Pa.
Sunshine Scientific Instrument, 1810 Grant Ave., Philadelphia 15, Pa.
Superior Air Products Co., 132 Malvern St., Newark 5, N. J.
Superior Carbon Products, Inc., 9115 George Ave., Cleveland 5, Ohio
Superior Flake Graphite Co., 33 S. Clark St., Chicago 3, Ill.
Superior Flux & Mfg. Co., 1302 Ontario St., Cleveland 13, Ohio
Superior Industrial Gas Corp., 23-24 47th St., Astoria, N. Y.
Superior Mfg. Co., 13th and Rockland Sts., Philadelphia 41, Pa.
Superior Pneumatic, Div. of Bingham Herbrand Corp., 4758 Warner Rd., Cleveland 25, Ohio
Superior Oxy-Acetylene Mach. Co., 1102 High St., Hamilton, Ohio
Superior Steel Corp., Carnegie, Pa.
Superior Tube Co., 2204 Germantown Ave., Box 191, Norristown, Pa.
Superior Tube Corp., 6645 N. Oliphant, Chicago, Ill.
Superior Valve & Fittings Co., W. Liberty Ave., Pittsburgh 26, Pa.
Superior Welding Co., 3410 E. 14th St., Los Angeles 23, Calif.
Superior Welding & Machine Co., Bartlesville, Okla.
Superweld Corp., 6840 Vineland Ave., North Hollywood, Calif.
Surface Combustion Corp., 2375 Dorr St., Toledo 7, Ohio
Swartwout Co., 18511 Euclid Ave., Cleveland 12, Ohio
Swartz & White Mfg. Co., Binghamton Flexible Shaft Div., 486 Chenango St., Binghamton, N. Y.
Swift Electric Welder Co., 8095 Livernois St., Detroit 4, Mich.
Swift Ohio Corp., 17325 Lamont, Detroit 12, Mich.
Swiss Laboratory, 1533 Hamilton Ave., Cleveland 14, Ohio
Sylvania Electric Prods., Inc., 1740 Broadway, New York 19, N. Y. Tungsten & Chemical Div., P.O. Box 70, 718 Main St., Towanda, Pa.
Synchro Electronic Corp., 1565 Railroad Ave., Bridgeport, Conn.
Syntron Co., 815 Lexington Ave., Homer City, Pa.
Syracuse Alloy Metals Corp., 114 S. Salina St., Syracuse 2, N. Y.
Syracuse Special Machine Co., Syracuse, N. Y.

T

Taco West Corp., 2620 S. Park Ave., Chicago, Ill.
Tal Bender, Inc., 417 N. Water St., Milwaukee 2, Wis.
Taylor, S. G., Chain Co., 141st St., Hammond Ind.
Taylor Cylinder Div., Cuneo Press, 2262 S. Grove St., Chicago, Ill.
Taylor Forge & Pipe Works, P. O. Box 465, Chicago 90, Ill.
Taylor-Wharton Co., Div. of Harsco Corp., Easton, Pa.
Taylor Winfield Corp., 1052 Mahoning, N.W., Warren, Ohio.
Tec Torch Co., Inc., 300 Paterson Ave., Carlstadt, N. J.
Techline Div. of Wheelabrator Corp., 1437 Avenue V, Vicksburg, Mich.
Technical Operations, Inc., Arlington, Mass.
Techno Products Inc., 1908 E. 66th St., Cleveland, Ohio
Techtmann Industries, 407 E. Michigan St., Milwaukee, Wis.
Tempil Corp., 132 W. 22nd St., New York 11, N. Y.
Templeton, Kenly & Co., Gardner Road & 16th St., Broadview, Ill.
Tennessee Fabricating Co., 1490 Grimes St., Memphis, Tenn.
Teuscher Pulley & Belting Co., 801 N. 2nd St., St. Louis, Mo.
Tex-Air Gas Co., Inc., 211 Buchanan St., Amarillo, Texas
Texas Delta Development Corp., P.O. Box 960, Lockhart, Texas
Thermacote Co., 108 S. DeLacey Ave., Pasadena, Calif.
Thermex Equip. Co., 3436 Book Bldg., Detroit, Mich.
Thermo Elec. Mfg. Co., 465 Huff St., Dubuque, Iowa
Thermo Materials, Inc., 1275 Harrison St., San Francisco, Calif.
Thomas & Middleton Equip. Designers, 5507 Waters Drive, Savannah, Ga.
Thomas Machine Mfg. Co., Butler Road, Pittsburgh 23, Pa.
Thomas Truck & Caster Co., 74 Mississippi River, Keokuk, Iowa
Thompson & Co., 1085 Allegheny Ave., Oakmont, Pa.
Thompson, H. G., & Son Co., 277 Chapel St., New Haven 5, Conn.
Thompson Products, Inc., Cleveland 3, Ohio.
Thomson Electric Welder Co., 161 Pleasant St., Lynn, Mass.
Thor Power Tool Co., Prudential Plaza, Chicago 1, Ill.
Threadwell Tap & Die Co., 16 Arch St. Greenfield, Mass.
Tillman, John & Co., 1561 W. 19th St., Long Beach 10, Calif.
Timken Roller Bearing Co., 1835 Dueber Ave., S. W. Canton 6, Ohio
Tinkote Co., 79 Milll St., Revere 51, Mass.
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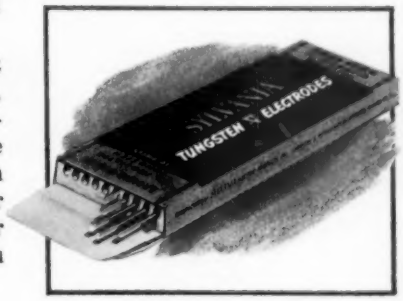

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